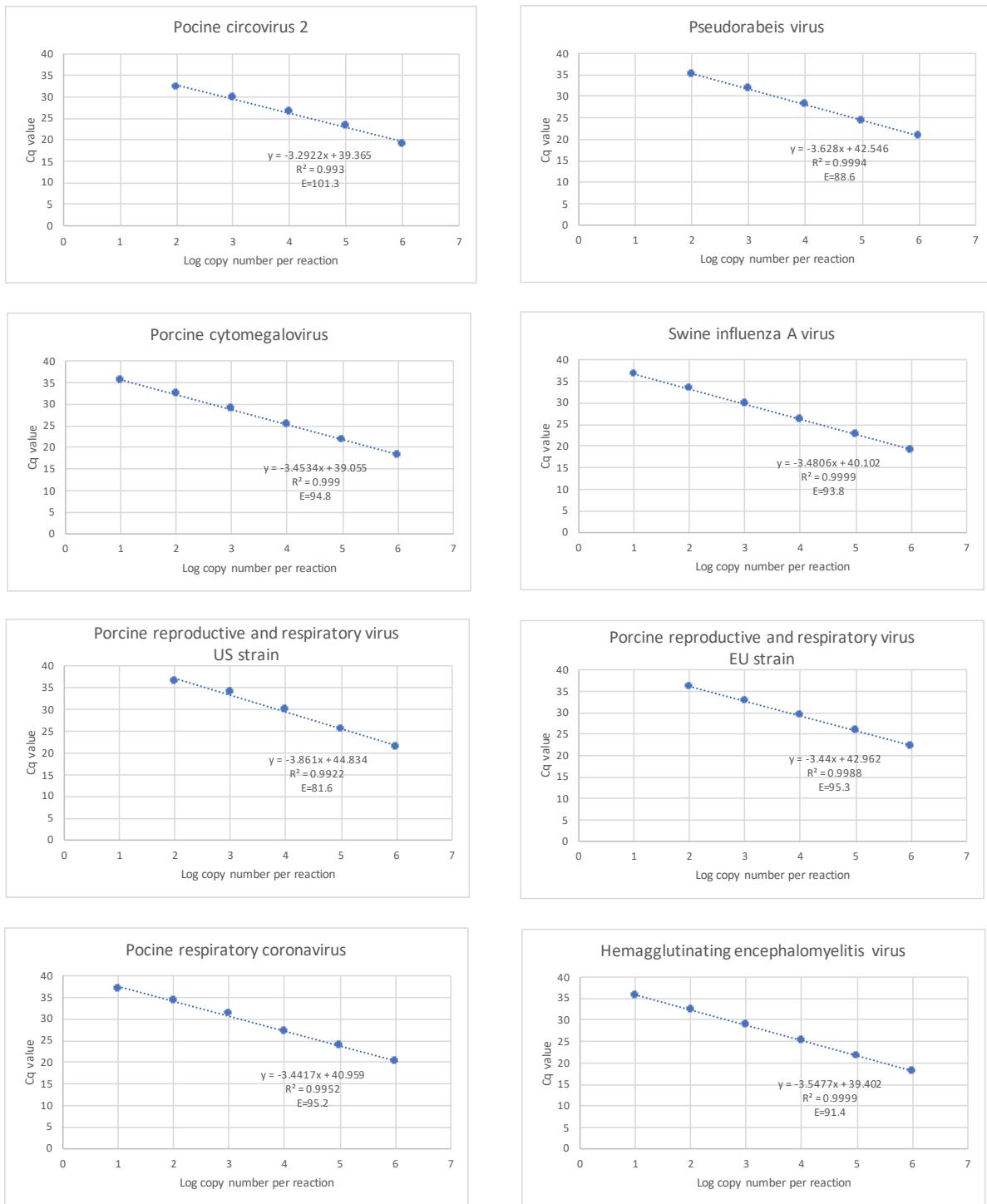


Supplemental Figure 1 (A) Standard curves using synthesized DNA.

Cq values were plotted against the log copy number of synthesized DNA. The regression curve (y), correlation coefficient (R^2) and PCR efficiency (E) were calculated.



Supplemental Figure 1 (B). Standard curves using synthesized DNA.

Cq values were plotted against the log copy number of synthesized DNA. The regression curve (y), correlation coefficient (R^2) and PCR efficiency (E) were calculated.

Supplemental table 1. (continued)
Bordetella bronchiseptica

Accession No.	Country	Host	Collecting date	Strain name	Reverse primer	Probe (Reverse complement sequence)	Forward primer (Reverse complement sequence)
BX640444	USA	Rabbit	N/A	Bordetella bronchiseptica strain RB50 complete genome segment8/16	T A A C C C C G C A A A C C T G C G G A A T C C C A G G	A A G G C C T T C C C G C C C G G	A A G C C T T C C C G C C C G G
HE965906	USA	Dog	N/A	Bordetella bronchiseptica 253 complete genome	-	-	-
CP024171	USA	N/A	1983	Bordetella bronchiseptica strain D448 chromosome complete genome	-	-	-
CP020649	USA	Homo sapiens	1971	Bordetella bronchiseptica strain E010 chromosome complete genome	-	-	-
CP014013	USA	Rabbit	1994	Bordetella bronchiseptica strain ATCC BAA-588D-5 chromosome complete genome	-	-	-
LR134480	N/A	N/A	1951	Bordetella bronchiseptica strain NCTC834 genome assembly chromosome: 1	-	-	-
CP024173	USA	Homo sapiens	1968	Bordetella bronchiseptica strain D987 chromosome complete genome	-	-	-
CM002881	USA	dog	N/A	Bordetella bronchiseptica strain ATCC 10580 chromosome wholegenome shotgun sequence	-	-	-
L13034	N/A	N/A	N/A	Bordetella bronchiseptica flagellin (flaA) gene complete cds	-	-	-
LR134326	N/A	Rabbit	1952	Bordetella bronchiseptica strain NCTC10543 genome assembly chromosome: 1	-	-	-
AP014582	Japan	Pig	1988	Bordetella bronchiseptica DNA complete genome strain: S798	-	-	-
JGXM01000023	Netherlands	Pig	2013 submission	Bordetella bronchiseptica MBORD849 ctg180000002685 whole genomeshotgun sequence.	-	-	-
JHBO01000027	Australia	Pig	2013 submission	Bordetella bronchiseptica MBORD78 ctg180000002898 whole genomeshotgun sequence.	-	-	-
AP014582	Japan	Pig	1988	Bordetella bronchiseptica DNA complete genome strain: S798	-	-	-
JGXM01000044	USA	Pig	2013 submission	Bordetella bronchiseptica MBORD668 ctg180000002963 whole genomeshotgun sequence.	-	-	-
JHBR01000032	Ireland	Pig	2013 submission	Bordetella bronchiseptica MBORD762 ctg180000002404 whole genomeshotgun sequence.	-	-	-
JGWS01000034	USA	Pig	1997	Bordetella bronchiseptica CARE97001888 ctg7180000004655 wholegenome shotgun sequence.	-	-	-
JGXM01000029	USA	Pig	2013 submission	Bordetella bronchiseptica MBORD670 ctg180000002691 whole genomeshotgun sequence.	-	-	-
JGXL01000010	USA	Pig	2013 submission	Bordetella bronchiseptica MBORD665 ctg7180000001627 whole genomeshotgun sequence.	-	-	-
JNHR01000021	Hungary	Pig	1993	Bordetella bronchiseptica KM22 contig000021 whole genome shotgunsequence.	-	-	-
EU327790	China	N/A	2007 submission	Bordetella bronchiseptica strain B27 flagellin (flaA) gene 5 flanking region	-	-	-
EU327789	China	N/A	2007 submission	Bordetella bronchiseptica strain B87 flagellin (flaA) gene 5 flanking region	-	-	-

Supplemental table 1. (continued)
Haemophilus parasuis



Supplemental Table 1 (continued)

Supplemental table 1. (continued)

Supplemental table 1 (continued)

Supplemental Table 1. (continued)
Pasteurella multocida *toxA*

Supplementary table 4 (continued)

Supplemental table 1. (continued)
Streptococcus suis

Detailed description of the phylogenetic tree:

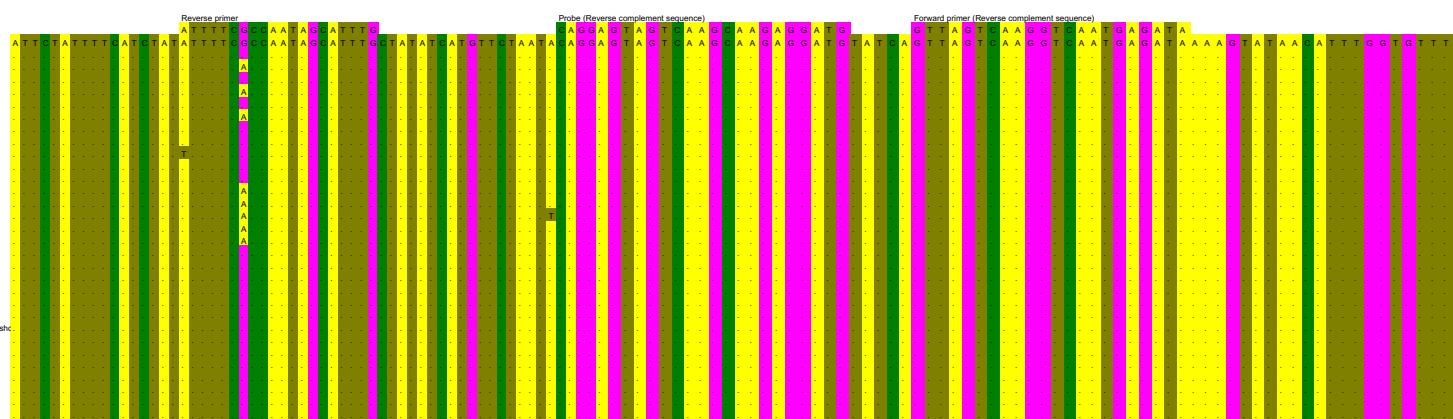
- Root:** Located at the bottom center of the tree.
- Nodes:** Indicated by small circles with numbers representing bootstrap values. Major nodes are labeled with country names: "Netherlands", "China", "Denmark", "Canada", and "USA".
- Isolates:** Represented as vertical bars with the following information from top to bottom:
 - Accession No.
 - Identified country
 - Collection/submitter/year
 - Strain name
 - Forward primer
 - Reverse primer
 - Genome region
- Color Coding:** Isolates are color-coded by country: Netherlands (blue), China (red), Denmark (green), Canada (orange), and USA (yellow).
- Sequence Data:** The 16S rRNA gene sequence is shown as a series of colored boxes (A, T, C, G) along the vertical bars, representing the nucleotide sequence at each position.

Supplemental table 1. (continued)
Mycoplasma hyopneumoniae

Accession No.	Identified country	Collection/Submission	Strain name	Forward primer	Probe	Reverse primer (Reverse complement sequence)
AF012905	NA	1997 submission	<i>Mycoplasma hyopneumoniae</i> cltum adhesin operon; cltum adhesin P97/P97 gene partial	A A G A A G C A A G G G T C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A	A G G A C A A G C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A	G G A C A A G C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A
AE017332	NA	NA	<i>Mycoplasma hyopneumoniae</i> 232 complete genome	A A G A A G C A A G G G T C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A	A G G A C A A G C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A	G G A C A A G C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A
U0241693	Germany	1997	<i>Mycoplasma hyopneumoniae</i> NCTC10127 genome assembly plasmid2.	A A G A A G C A A G G G T C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A	A G G A C A A G C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A	G G A C A A G C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A
CP038641	China	2017	<i>Mycoplasma hyopneumoniae</i> strain ES-2 chromosome complete genome	A A G A A G C A A G G G T C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A	A G G A C A A G C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A	G G A C A A G C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A
AE017244	Brazil	NA	<i>Mycoplasma hyopneumoniae</i> 7448 complete genome	A A G A A G C A A G G G T C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A	A G G A C A A G C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A	G G A C A A G C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A
AE017243	NA	NA	<i>Mycoplasma hyopneumoniae</i> J complete genome	A A G A A G C A A G G G T C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A	A G G A C A A G C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A	G G A C A A G C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A
CP000009	Brazil	2012 submission	<i>Mycoplasma hyopneumoniae</i> 3994 complete genome	A A G A A G C A A G G G T C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A	A G G A C A A G C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A	G G A C A A G C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A
CP022714	South Korea	2014	<i>Mycoplasma hyopneumoniae</i> strain KM14 chromosome complete genome	A A G A A G C A A G G G T C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A	A G G A C A A G C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A	G G A C A A G C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A
CP000131	NA	2011 submission	<i>Mycoplasma hyopneumoniae</i> 168-L complete genome	A A G A A G C A A G G G T C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A	A G G A C A A G C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A	G G A C A A G C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A
CP002274	China	1974	<i>Mycoplasma hyopneumoniae</i> 168-L complete genome	A A G A A G C A A G G G T C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A	A G G A C A A G C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A	G G A C A A G C A A A G T C A A A G T C A G C A A A C A G A A C C G A G T T T C G A C T T C A T G G C C T C A

Supplemental table 1. (continued)
Mycoplasma hyorhinis

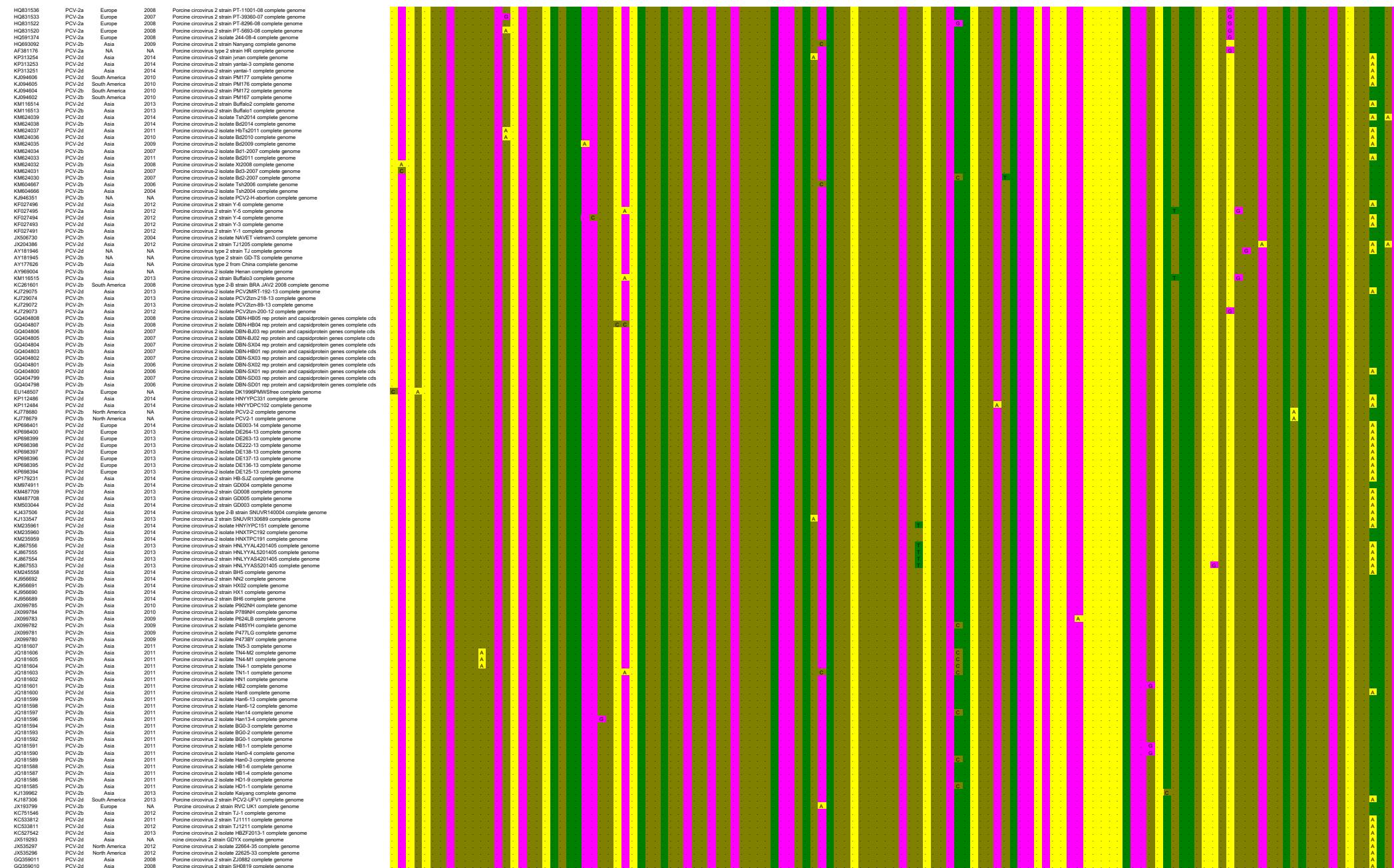
Accession No.	Identified country	Host	Collection/Submission year	Strain name
KC461221	NA	NA	2013 submission	Mycobacteria hyrophila strain NJ-7 membrane lipoprotein (p37) gene complete cds
KC461220	NA	NA	2013 submission	Mycobacteria hyrophila strain NJ-7 membrane lipoprotein (p37) gene complete cds
KC461219	NA	NA	2013 submission	Mycobacteria hyrophila strain NJ-7 membrane lipoprotein (p37) gene complete cds
KC461218	NA	NA	2013 submission	Mycobacteria hyrophila strain NJ-4 membrane lipoprotein (p37) gene complete cds
KC461217	NA	NA	2013 submission	Mycobacteria hyrophila strain NJ-3 membrane lipoprotein (p37) gene complete cds
KC461216	NA	NA	2013 submission	Mycobacteria hyrophila strain NJ-2 membrane lipoprotein (p37) gene complete cds
KC451003	NA	NA	2012 submission	Mycobacteria hyrophila strain NJ-1 membrane lipoprotein (p37) gene complete cds
KF06458	France	Pig	2013 submission	Mycobacteria hyrophila strain M747 membrane lipoprotein (p37) gene partial cds
KF06457	France	Pig	2013 submission	Mycobacteria hyrophila strain M755 membrane lipoprotein-like (p37) gene partial sequence
KF06456	France	Pig	2013 submission	Mycobacteria hyrophila strain M797 membrane lipoprotein (p37) gene partial cds
KF06455	France	Pig	2013 submission	Mycobacteria hyrophila strain M798 membrane lipoprotein (p37) gene partial cds
KF06453	France	Pig	2013 submission	Mycobacteria hyrophila strain M800 membrane lipoprotein (p37) gene partial cds
KF06452	France	Pig	2013 submission	Mycobacteria hyrophila strain M899 membrane lipoprotein (p37) gene partial cds
KF06451	France	Pig	2013 submission	Mycobacteria hyrophila strain M896 membrane lipoprotein (p37) gene partial cds
KF06450	France	Pig	2013 submission	Mycobacteria hyrophila strain M919 membrane lipoprotein (p37) gene partial cds
KF06449	France	Pig	2013 submission	Mycobacteria hyrophila strain M721 membrane lipoprotein (p37) gene partial cds
KF06448	France	Pig	2013 submission	Mycobacteria hyrophila strain M177 membrane lipoprotein (p37) gene partial cds
KF06447	France	Pig	2013 submission	Mycobacteria hyrophila strain M123 membrane lipoprotein (p37) gene partial cds
KF06446	France	Pig	2013 submission	Mycobacteria hyrophila strain M100 membrane lipoprotein (p37) gene partial cds
KF06445	France	Pig	2013 submission	Mycobacteria hyrophila strain ATCC 25021 membrane lipoprotein (p37)gene partial cds
MF20154	France	Pig	2013 submission	Mycobacteria hyrophila strain M120 membrane lipoprotein-like (p37) gene partial sequence
MYCP1725769	NA	NA	1988	M.hydrophilus p37 and p39 genes complete cds
X11410	NA	NA	1988	M.hydrophilus p37 and p39 genes complete cds
NZ_KB911485	NA	Pig	2013 submission	Mycobacteria hyrophila_17881 strain BTSTF801DRAFT scaffold00001.1 whole genome
CP003914	NA	Pig	2013 submission	Mycobacteria hyrophila SK76 complete genome
CP016817	Brazil	Bovine	2014	Mycobacteria hyrophila strain MDBK-IV complete genome
NC_0280	USA	NA	2012	Mycobacteria hyrophila DBS_1050 complete genome
CP03321	NA	NA	2012 submission	Mycobacteria hyrophila_GDL_1 complete genome
NZ_LSS91950	NA	Pig	1900 1970	Mycobacteria hyrophila strain NCTC10130 genome assembly chromosome:1
CP002170	China	Pig	2011 submission	Mycobacteria hyrophila HUB-1 complete genome
LR24949	NA	NA	1900 1968	Mycobacteria hyrophila NCTC1021 genome assembly plasmid: 3

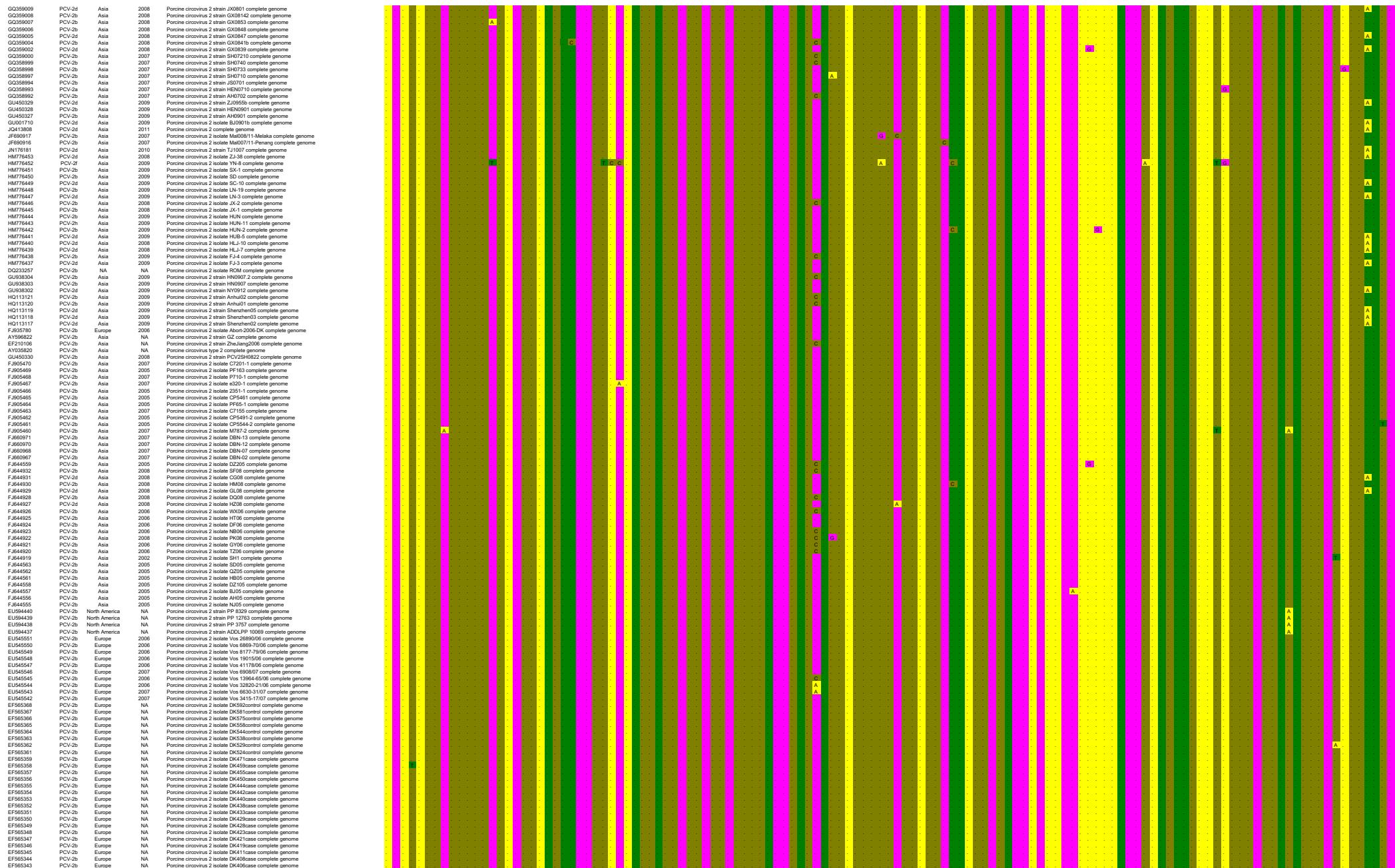


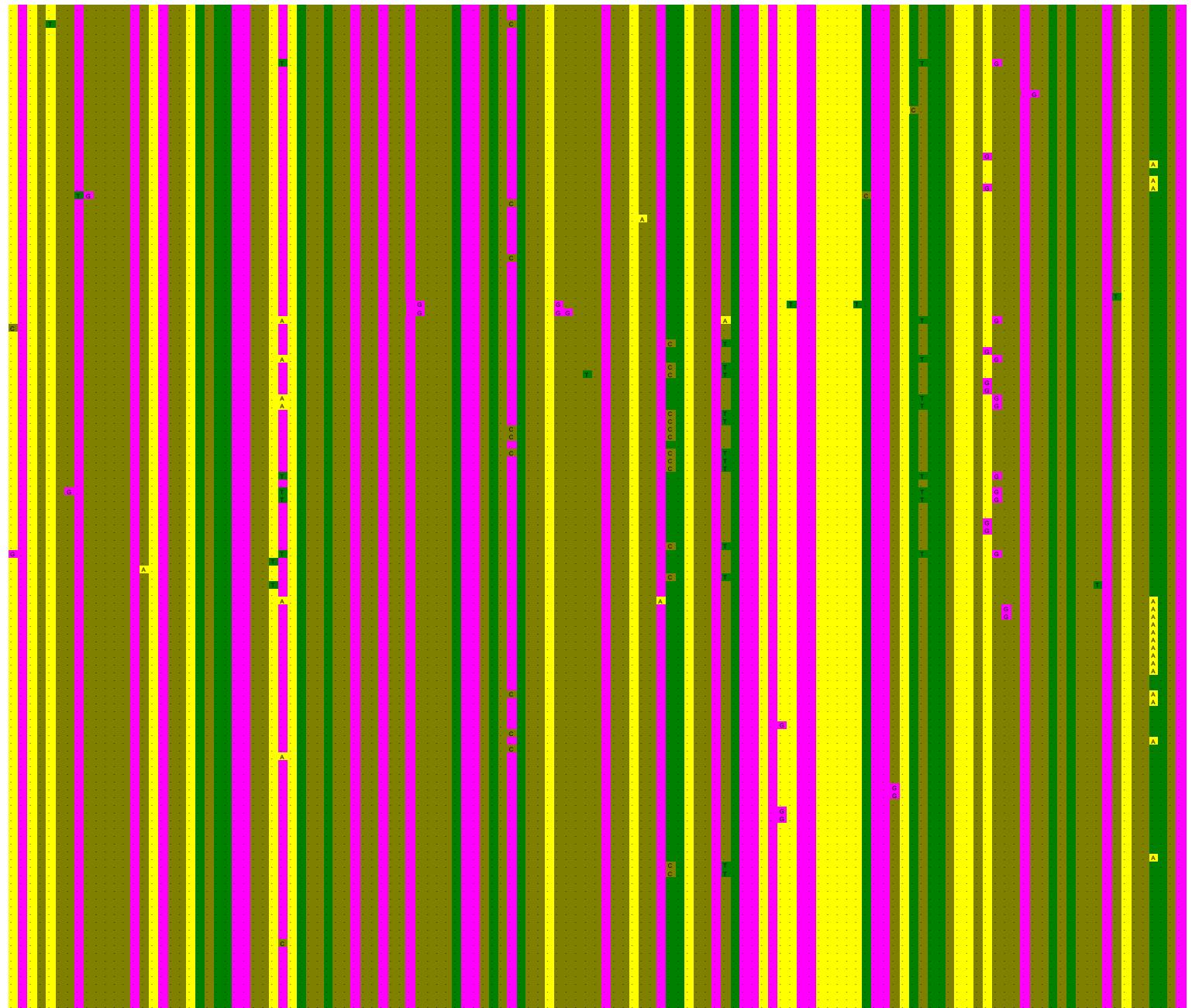
Supplemental table 1. (continued)
Mycoplasma hyosynoviae

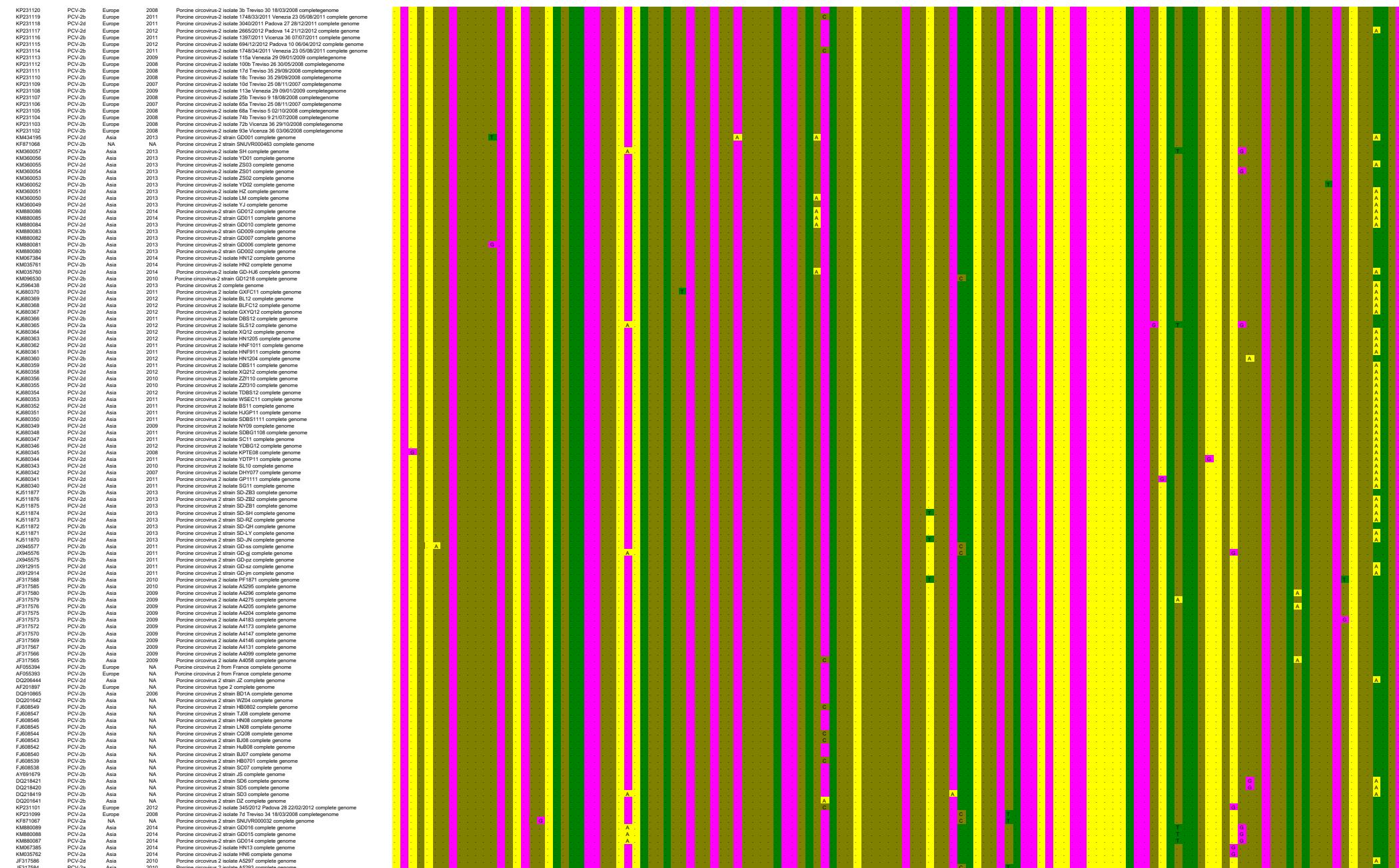
Accession No.	Identified country	Host	Collection/Submission	Strain name	Forward primer	Probe	Reverse primer (Reverse complement sequence)
NZ_JPK01000046	USA	Pg	2013	Mycoplasma hyosynoviae strain NPL4 config049 whole genome shotgunsequence	A A A X G G A G G A X A X A	C C A A G G A A T T G	G G A X A A C C C C A A A G G G
NZ_JPK01000046	USA	Pg	2013	Mycoplasma hyosynoviae strain NPL2 config046 whole genome shotgunsequence	A T T T A A C C T T T T A	C T C C A A C C G A T A A A A	G C C C C A A C C C C A A A G G G
NZ_JPKG01000003	USA	Pg	2013	Mycoplasma hyosynoviae strain NPL2 config003 whole genome shotgunsequence	C T C C A A C C G A T A A A A	G C C C A A C C C C A A A G G G	G C C C C A A C C C C A A A G G G
NZ_JPK01000027	USA	Pg	2013	Mycoplasma hyosynoviae strain NPL4 config027 whole genome shotgunsequence	C O A A A A A T T T T T T T	G A A X T G G A T C C C C C C C	G C C C C A A C C C C A A A G G G
NZ_JPKM01000011	USA	Pg	2013	Mycoplasma hyosynoviae strain NPL5 config011 whole genome shotgunsequence	T A A A A A A A A A A A A A	A G A X T G G A T C C C C C C C	G C C C C A A C C C C A A A G G G
NZ_JPKM01000011	USA	Pg	2013	Mycoplasma hyosynoviae strain NPL5 config011 whole genome shotgunsequence	T A A A A A A A A A A A A A	A G A X T G G A T C C C C C C C	G C C C C A A C C C C A A A G G G
NZ_SOCH01000008	NA	Pg	2019 submission	Mycoplasma hyosynoviae strain ATCC 25991 Gao02897 scf05000077 whole genome shotgunsequence	A A A A A A A A A A A A A	A A A A A A A A A A A A A	G C C C C A A C C C C A A A G G G
NZ_JPK01000017	USA	Pg	2013	Mycoplasma hyosynoviae strain NPL2 config017 whole genome shotgunsequence	A A A A A A A A A A A A A	A T T T T T A A A A A A A	G C C C C A A C C C C A A A G G G
CP008748	NA	Pg	1970	Mycoplasma hyosynoviae strain M69 complete genome	A A A A A A A A A A A A A	A T T T T T A A A A A A A	G C C C C A A C C C C A A A G G G

Supplemental table 1. (continued)
Porcine circovirus 2

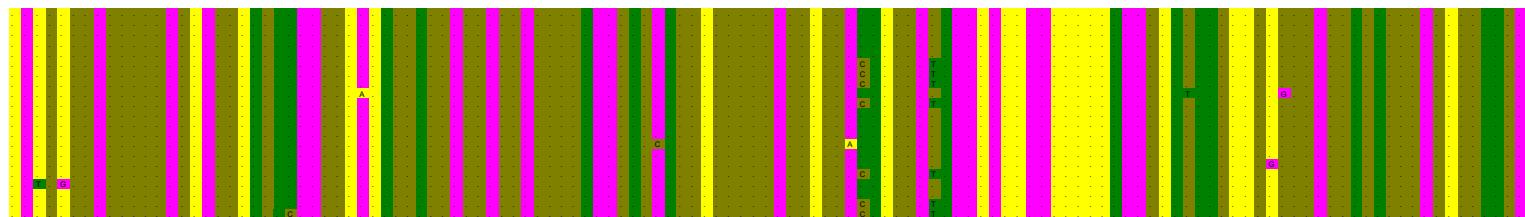








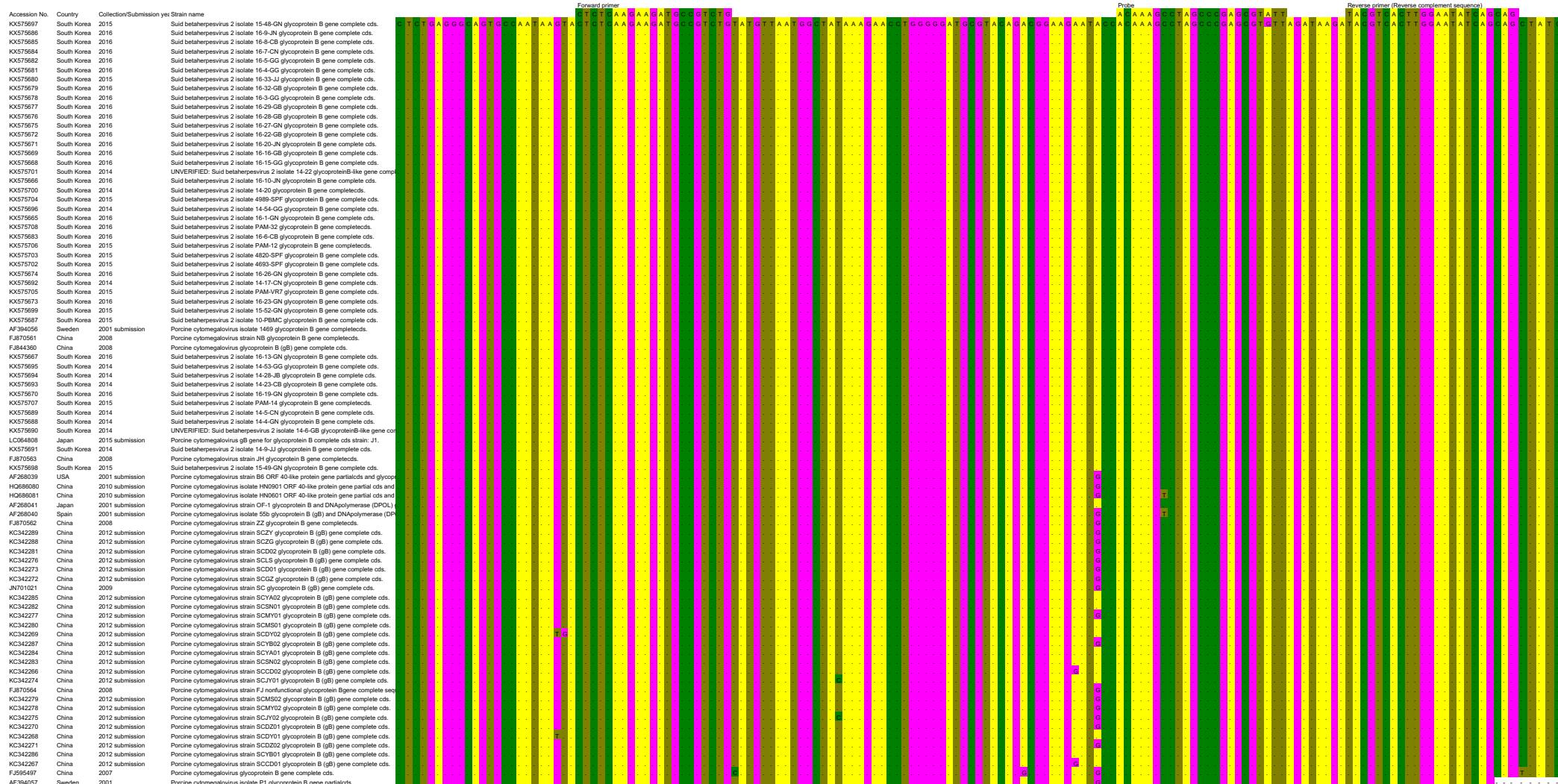
JF317583	PCV-2b	Asia	2009	Porcine circovirus 2 isolate A4321 complete genome
JF317578	PCV-2b	Asia	2009	Porcine circovirus 2 isolate A4242 complete genome
JF317577	PCV-2b	Asia	2009	Porcine circovirus 2 isolate A4243 complete genome
JF317571	PCV-2b	Asia	2009	Porcine circovirus 2 isolate A4160 complete genome
JF317568	PCV-2b	Asia	2009	Porcine circovirus 2 isolate A4133 complete genome
HM000100	PCV-2a	Asia	2010	Porcine circovirus 2 isolate collection KCCM-10575 complete genome
AF093293	PCV-2a	North America	NA	Porcine circovirus type 2 isolate AF2897 complete genome
AF408635	PCV-2a	NA	NA	Porcine circovirus type 2 isolate IAF2897 complete genome
JO806749	PCV-2a	Asia	2010	Porcine circovirus 2 strain 1035-2 complete genome
AF227217	PCV-2a	NA	NA	Porcine circovirus 2 strain pma1035-2 complete genome
JX512680	PCV-2b	Europe	2008	Porcine circovirus 2 isolate S05-960 complete genome
JX512659	PCV-2b	Europe	2005	Porcine circovirus 2 isolate S05-1218 complete genome
JX512658	PCV-2b	Europe	2008	Porcine circovirus 2 isolate S05-1636/2-1 complete genome
EU000143	PCV-2a	Asia	2008	Porcine circovirus 2 strain Proglung-2 complete genome
AY146992	PCV-2a	Asia	NA	Porcine circovirus 2 strain Proglung-2 complete genome
JX512654	PCV-2a	Europe	2000	Porcine circovirus 2 isolate S00-1966/4-3 complete genome
AF405211	PCV-2a	Asia	NA	Porcine circovirus type 2 strain SC complete genome
AF405210	PCV-2a	Asia	NA	Porcine circovirus type 2 strain SC complete genome
AY146991	PCV-2a	Asia	NA	Porcine circovirus type 2 strain Proglung-1 complete genome
AF118097	PCV-2a	NA	NA	Porcine circovirus type 2 isolate IAF-4370 complete genome
AF147751	PCV-2a	NA	NA	Porcine circovirus type 2 unknown genes



Supplemental table 1. (continued)
Pseudorabies virus

Pseudorabies virus

Supplemental table 1. (continued)
Porcine cytomegalovirus



Supplemental table 1. (continued)
Swine Influenza A virus

Swine Influenza A

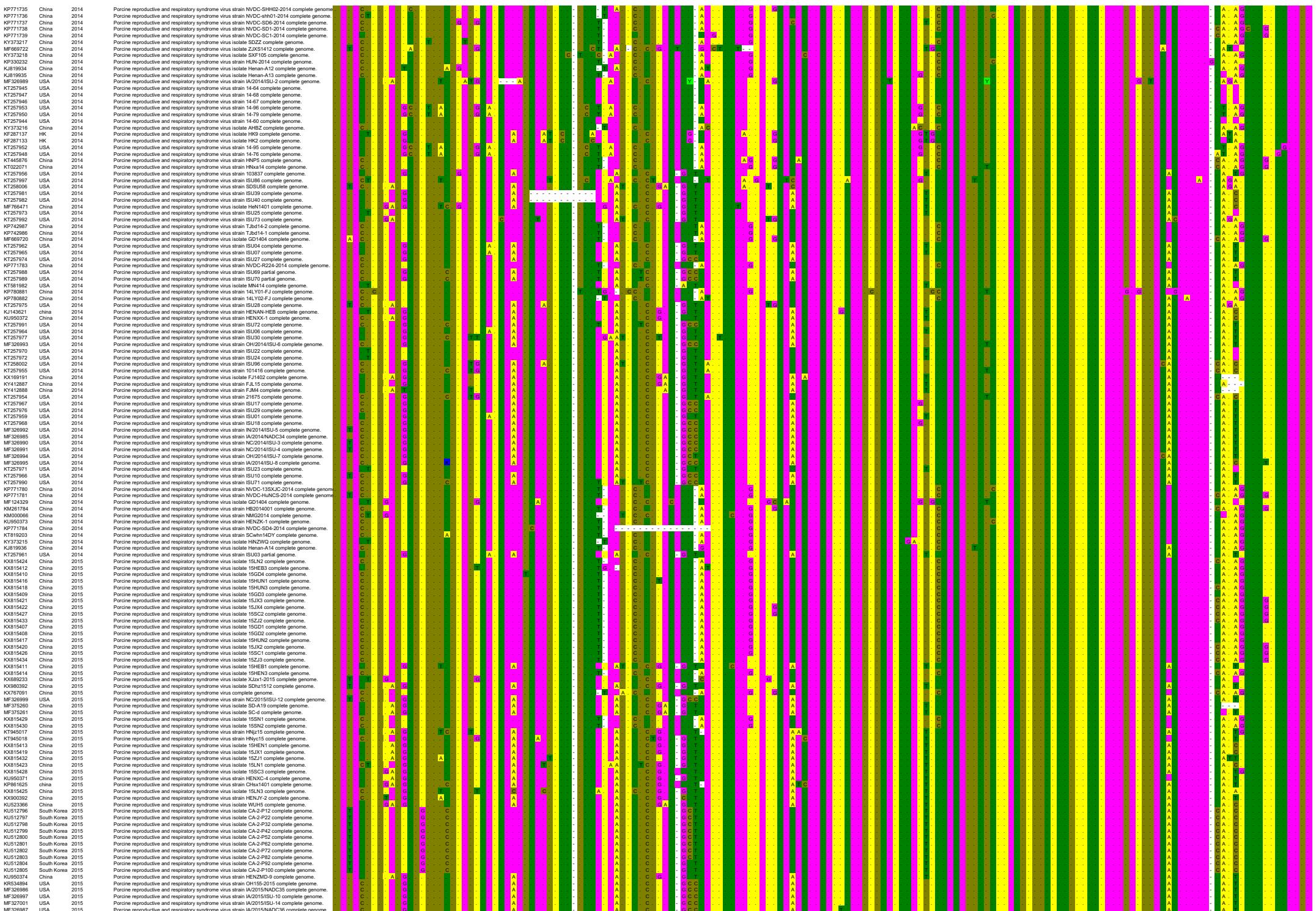
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KR700423	H1N1	United King	2013	Aiswne/England/013348/2013 2013/10/7 7 (MP)
JF912326	H1N1	USA	2010	Aiswne/California/A/104504/2010/2010/11/17 7 (MP)
KC748499	H1N1	USA	2013	Aiswne/USA/O/14452629/2013 2013/02/18 7 (MP)
CY083011	H1N1	China	2009	Aiswne/Hubei/1012/2009 2009/08/18 7 (MP)
CY093770	H1N1	China	2009	Aiswne/Hubei/102/2009 2009/08/18 7 (MP)
CY091740	H1N1	China	2009	Aiswne/Hubei/01/2009 2009/01/30 7 (MP)
CY091748	H1N1	China	2009	Aiswne/Hubei/03/2009 2009/01/30 7 (MP)
FJ5361H1	H1N1	China	2009	Aiswne/Hubei/04/2009 2009/01/30 7 (MP)
GU008076	H1N1	China	2009	Aiswne/Shandong/327/2009 2009/7 (MP)
GU008096	H1N1	China	2009	Aiswne/Shandong/275/2009 2009/7 (MP)
JF800939	H1N1	China	2011	Aiswne/Jiangsu/15/2011 2011/02/05 7 (MP)
JF820226	H1N1	China	2011	Aiswne/Jiangsu/16/2011 2011/02/05 7 (MP)
KM256560	H1N1	China	2011	Aiswne/Jiangsu/17/2011 2011/02/05 7 (MP)
CY085825	H1N1	Hong Kong	2007	Aiswne/Hong Kong/S/2007 2007/12/06 7 (MP)
CY085833	H1N1	Hong Kong	2007	Aiswne/Hong Kong/35/2007 2007/12/07 7 (MP)
CY081889	H1N1	Hong Kong	2009	Aiswne/Hong Kong/20/2009 2009/01/09 7 (MP)
CY085553	H1N1	Hong Kong	2003	Aiswne/Hong Kong/N/29/2003 2003/02/06 7 (MP)
CY085561	H1N1	Hong Kong	2003	Aiswne/Hong Kong/38/2003 2003/05/08 7 (MP)
CY085569	H1N1	Hong Kong	2014	Aiswne/Shanghai/3/2014 2014/10/04 7 (MP)
KM59456	H1N1	China	2009	Aiswne/Hong Kong/2/2009 2009/10/08 7 (MP)
CY085905	H1N1	China	2009	Aiswne/Hong Kong/2/2009 2009/10/08 7 (MP)
GQ229327	H1N1	Hong Kong	2007	Aiswne/Hong Kong/S/17/2007 2007/12/16 7 (MP)
KF57135	H1N1	China	2011	Aiswne/Jiangsu/15/2011 2011/02/05 7 (MP)
KF57136	H1N1	China	2011	Aiswne/Jiangsu/16/2011 2011/02/05 7 (MP)
KF57134	H1N1	China	2011	Aiswne/Jiangsu/17/2011 2011/02/05 7 (MP)
CY085913	H1N1	Hong Kong	2009	Aiswne/Hong Kong/S/43/2009 2009/01/08 7 (MP)
G222003	H1N1	Hong Kong	2009	Aiswne/Hong Kong/35/2009 2009/01/08 7 (MP)
JN805897	H1N1	China	2009	Aiswne/Jiangsu/2/2009 2009/01/08 7 (MP)
JN809211	H1N1	China	2011	Aiswne/Jiangsu/2/2011 2011/01/07 7 (MP)
JN809202	H1N1	China	2010	Aiswne/Jiangsu/3/2010 2010/10/27 (MP)
JN809218	H1N1	China	2010	Aiswne/Jiangsu/3/2010 2010/10/27 (MP)
KM205050	H1N1	Hong Kong	2011	Aiswne/Hong Kong/48/2011 2011/12/07 7 (MP)
CY081862	H1N1	Hong Kong	2009	Aiswne/Hong Kong/289/2009 2009/12/17 7 (MP)
KM209130	H1N1	Hong Kong	2012	Aiswne/Hong Kong/N/32/2012 2012/01/05 7 (MP)
KM209131	H1N1	Hong Kong	2012	Aiswne/Hong Kong/145/2012 2012/01/05 7 (MP)
CY118383	H1N1	France	1999	Aiswne/Hong Kong/145/1999 1999/7 (MP)
CY085921	H1N1	Hong Kong	2009	Aiswne/Hong Kong/199/2009 2009/02/05 7 (MP)
JN809217	H1N1	China	2011	Aiswne/Jiangsu/1/2011 2011/01/07 7 (MP)
JN809208	H1N1	China	2010	Aiswne/Jiangsu/1/2010 2010/10/27 (MP)
JN809207	H1N1	China	2010	Aiswne/Jiangsu/2/2010 2010/10/27 (MP)
KF57137	H1N1	China	2011	Aiswne/Jiangsu/3/2011 2011/01/07 7 (MP)
JN809215	H1N1	China	2011	Aiswne/Jiangsu/3/2011 2011/01/07 7 (MP)
JN809212	H1N1	China	2011	Aiswne/Jiangsu/4/2011 2011/01/07 7 (MP)
JG319851	H1N1	China	2011	Aiswne/Jiangsu/4/2011 2011/01/09 7 (MP)
JK400391	H1N1	China	2011	Aiswne/Jiangsu/5/2011 2011/01/09 7 (MP)
KM209314	H1N1	Hong Kong	2012	Aiswne/Hong Kong/S/87/2012 2012/01/15 7 (MP)
KM209322	H1N1	Hong Kong	2012	Aiswne/Hong Kong/S/87/2012 2012/01/15 7 (MP)
KM209320	H1N1	Hong Kong	2012	Aiswne/Hong Kong/S/87/2012 2012/01/15 7 (MP)
KM209338	H1N1	Hong Kong	2012	Aiswne/Hong Kong/S/97/2012 2012/01/15 7 (MP)
KM209346	H1N1	Hong Kong	2012	Aiswne/Hong Kong/S/97/2012 2012/01/15 7 (MP)
KM209344	H1N1	Hong Kong	2012	Aiswne/Hong Kong/S/97/2012 2012/01/15 7 (MP)
KM209370	H1N1	Hong Kong	2012	Aiswne/Hong Kong/S/84/2012 2012/01/15 7 (MP)
KM209378	H1N1	Hong Kong	2012	Aiswne/Hong Kong/S/93/2012 2012/01/15 7 (MP)
JN809216	H1N1	China	2011	Aiswne/Jiangsu/3/2011 2011/01/09 7 (MP)
JN809210	H1N1	China	2011	Aiswne/Jiangsu/3/2011 2011/01/09 7 (MP)
CY081820	H1N1	Hong Kong	2009	Aiswne/Hong Kong/243/2009 2009/11/05 7 (MP)
HU18907	H1N1	China	2010	Aiswne/Guangdong/1/2010 2010/01/15 7 (MP)
KM209325	H1N1	Hong Kong	2012	Aiswne/Hong Kong/S/98/2012 2012/01/15 7 (MP)
CY085873	H1N1	Hong Kong	2008	Aiswne/Hong Kong/S/52/2008 2008/10/23 7 (MP)
JN809206	H1N1	China	2010	Aiswne/Jiangsu/7/2010 2010/10/27 (MP)
JN809204	H1N1	China	2010	Aiswne/Jiangsu/7/2010 2010/10/27 (MP)
KM209494	H1N1	Hong Kong	2010	Aiswne/Hong Kong/14/2010 2010/10/31 7 (MP)
JN809203	H1N1	China	2010	Aiswne/Jiangsu/5/2010 2010/10/27 (MP)
KM209202	H1N1	China	2011	Aiswne/Jiangsu/5/2011 2011/12/30 (MP)
KM209270	H1N1	China	2011	Aiswne/Guangxi/385/2011 2011/12/30 (MP)
KM209278	H1N1	China	2011	Aiswne/Guangxi/385/2011 2011/12/30 (MP)
KM209386	H1N1	China	2011	Aiswne/Guangxi/386/2011 2011/12/30 (MP)
KM209402	H1N1	China	2011	Aiswne/Guangxi/387/2011 2011/12/30 (MP)
KM209410	H1N1	China	2011	Aiswne/Guangxi/387/2011 2011/12/30 (MP)
KM209283	H1N1	China	2011	Aiswne/Guangxi/387/2011 2011/12/30 (MP)
KM209304	H1N1	China	2011	Aiswne/Guangxi/249/2011 2011/08/28 7 (MP)
KM209366	H1N1	China	2012	Aiswne/Guangxi/N/17/2012 2012/01/08 19 (MP)
KM209342	H1N1	China	2012	Aiswne/Guangxi/N/18/2012 2012/01/08 19 (MP)
KM209882	H1N1	China	2012	Aiswne/Guangxi/N/19/2012 2012/01/08 19 (MP)
KM209850	H1N1	China	2012	Aiswne/Guangxi/N/19/2012 2012/01/08 19 (MP)
JN809204	H1N1	China	2010	Aiswne/Jiangsu/6/2010 2010/12/07 (MP)
JN809205	H1N1	China	2010	Aiswne/Jiangsu/6/2010 2010/12/07 (MP)
CY118350	H1N1	France	2004	Aiswne/Finlande/80/2004 2004/7 (MP)
CY085977	H1N1	Hong Kong	2009	Aiswne/Hong Kong/S/14/2009 2009/02/19 7 (MP)
CY085981	H1N1	Hong Kong	2009	Aiswne/Hong Kong/255/2009 2009/02/19 7 (MP)
CY085953	H1N1	Hong Kong	2009	Aiswne/Hong Kong/256/2009 2009/02/19 7 (MP)
CY085977	H1N1	Hong Kong	2009	Aiswne/Hong Kong/256/2009 2009/02/19 7 (MP)
CY085945	H1N1	Hong Kong	2010	Aiswne/Hong Kong/197/2010 2010/10/15 7 (MP)
KU4744	H1N1	China	2009	Aiswne/Hong Kong/142/2009 2009/03/19 7 (MP)
CY085993	H1N1	Hong Kong	2009	Aiswne/Hong Kong/S/13/2009 2009/06/11 7 (MP)
JN809213	H1N1	China	2011	Aiswne/Jiangsu/5/2011 2011/01/07 7 (MP)
CY118445	H1N1	Belgium	2002	Aiswne/Gent/17/2002 2002/7 (MP)
CY118449	H1N1	Italy	2001	Aiswne/Italy/123/2001 2001/01/07 7 (MP)
KM1650	H1N2	Italy	2002	Aiswne/Italy/272/121/2002 2002/7 (MP)
KM209265	H1N1	China	2011	Aiswne/Guangdong/203/2011 2011/05/19 7 (MP)
JN809208	H1N1	China	2010	Aiswne/Jiangsu/2/2010 2010/12/07 (MP)
KM209786	H1N1	China	2010	Aiswne/Jiangsu/3/21/2010 2010/12/07 (MP)
KM209268	H1N1	China	2011	Aiswne/Jiangsu/3/2011 2011/01/09 7 (MP)
KM209530	H1N1	China	2011	Aiswne/Jiangsu/3/2011 2011/01/09 7 (MP)
KM209530	H1N1	China	2011	Aiswne/Jiangsu/3/2011 2011/01/09 7 (MP)
KM209514	H1N1	China	2011	Aiswne/Jiangsu/4/2011 2011/01/09 7 (MP)
KM209514	H1N1	China	2011	Aiswne/Jiangsu/4/2011 2011/01/09 7 (MP)
KM209514	H1N1	China	2011	Aiswne/Jiangsu/4/2011 2011/01/09 7 (MP)
CY085867	H1N1	Hong Kong	2008	Aiswne/Hong Kong/176/2008 2008/05/15 7 (MP)
HQ541641	H1N1	China	2007	Aiswne/Tianjin/1/2007 2007/12/7 (MP)
KM209288	H1N1	Hong Kong	2011	Aiswne/Hong Kong/S/484/2011 2011/12/15 7 (MP)
KM209066	H1N1	Hong Kong	2011	Aiswne/Hong Kong/S/484/2011 2011/12/15 7 (MP)
KM209074	H1N1	Hong Kong	2011	Aiswne/Hong Kong/S/484/2011 2011/12/15 7 (MP)
KM209292	H1N1	Hong Kong	2011	Aiswne/Hong Kong/S/484/2011 2011/12/15 7 (MP)
KM209290	H1N1	Hong Kong	2012	Aiswne/Hong Kong/S/84/2012 2012/01/16 7 (MP)
KM209292	H1N1	Hong Kong	2012	Aiswne/Hong Kong/S/84/2012 2012/01/16 7 (MP)
KM209292	H1N1	Hong Kong	2012	Aiswne/Hong Kong/S/72/2/10 2010/08/08 7 (MP)
CY118354	H1N2	Spain	2002	Aiswne/Span/405/64/2002 2002/7 (MP)
EU053136	H1N2	Germany	2005	Aiswne/Duesseldorf/174/73/2005 2005/12/07 7 (MP)
JN375313	H1N2	China	2010	Aiswne/Guangdong/267/2010 2010/08/26 7 (MP)
JN375314	H1N2	China	2010	Aiswne/Guangdong/267/2010 2010/08/26 7 (MP)
JN375318	H1N2	China	2010	Aiswne/Guangdong/271/2010 2010/08/26 7 (MP)
EU053144	H1N2	Germany	2005	Aiswne/Cologne/174/72/2005 2005/12/13 7 (MP)
KM207458	H1N2	France	2011	Aiswne/France/Alpinope/405/2011 2011/07/07 7 (MP)
KM207458	H1N2	France	2012	Aiswne/France/22/302/2012 2012/07/09 7 (MP)
KM207458	H1N2	France	2011	Aiswne/France/feet/Vaise/34/520/2011 2011/07/07 7 (MP)
KM207458	H1N2	France	2012	Aiswne/France/feet/Vaise/34/520/2012 2012/07/09 7 (MP)
KM207442	H1N1	China	2010	Aiswne/Guangdong/240/320/2010 2010/08/05 7 (MP)
KM207442	H1N1	China	2010	Aiswne/Guangdong/240/720/2010 2010/08/05 7 (MP)
KM207442	H1N1	China	2010	Aiswne/Guangdong/241/720/2010 2010/08/05 7 (MP)
KM207442	H1N1	China	2010	Aiswne/Guangdong/241/720/2010 2010/08/05 7 (MP)
KM207474	H1N1	China	2010	Aiswne/Guangdong/241/920/2010 2010/08/05 7 (MP)
KM207474	H1N1	China	2010	Aiswne/Guangdong/242/90/2010 2010/08/05 7 (MP)
KM207474	H1N1	China	2010	Aiswne/Guangdong/242/920/2010 2010/08/05 7 (MP)

KM027490	H1N1	China	2010	Alswine/Guangdong/2424/2010/2010/08/05 7 (MP)
KM027492	H1N1	China	2010	Alswine/Guangdong/2434/2010/2010/08/05 7 (MP)
CY116391	H1N1	France	2002	Alswine/Croix d'Amour/1624/2002/2002/07 7 (MP)
EU478807	H1N2	Germany	2003	Alswine/Hong Kong/NS2798/2003/2010/09/07 7 (MP)
KM029562	H1N1	Hong Kong	2010	Alswine/Hong Kong/NS2798/2010/2010/09/07 7 (MP)
KM029573	H1N1	Hong Kong	2010	Alswine/Hong Kong/NS2805/2010/2010/09/07 7 (MP)
KM029586	H1N1	Hong Kong	2010	Alswine/Hong Kong/NS2811/2010/2010/09/07 7 (MP)
KM029588	H1N1	Hong Kong	2010	Alswine/Hong Kong/NS2811/2010/2010/09/07 7 (MP)
KM029610	H1N1	Hong Kong	2010	Alswine/Hong Kong/2855/2010/2010/09/07 7 (MP)
KM029692	H1N1	Hong Kong	2010	Alswine/Hong Kong/2848/2010/2010/09/07 7 (MP)
KR70711	H1N1	France	2012	Alswine/Guangdong/2302/2012/2012/07/17 (MP)
KM27802	H1N1	China	2012	Alswine/Guangdong/NS2433/2012/2012/07/17 (MP)
KM29674	H1N1	China	2012	Alswine/Guangdong/NS2434/2012/2012/07/17 (MP)
KM29682	H1N1	China	2012	Alswine/Guangdong/NS2541/2012/2012/07/26 7 (MP)
KM029689	H1N1	China	2012	Alswine/Guangdong/NS2541/2012/2012/07/26 7 (MP)
KM029706	H1N1	China	2012	Alswine/Guangdong/NS2541/2012/2012/07/26 7 (MP)
KT27241	H1N1	China	2013	Alswine/Guapix/S2/2013/2013/03/06 7 (MP)
K498393	H1N1	China	2013	Alswine/Guapix/S2/2013/2013/03/06 7 (MP)
KM027602	H1N1	China	2011	Alswine/Guangdong/NS243/2011/2011/09/29 (MP)
KM02824	H1N1	China	2011	Alswine/Guangdong/NS243/2011/2011/09/29 (MP)
KM028330	H1N1	China	2011	Alswine/Guapix/S3/2011/2011/09/29 (MP)
KM028346	H1N1	China	2011	Alswine/Guapix/S3/2011/2011/09/29 (MP)
KM028348	H1N1	China	2011	Alswine/Guapix/S3/2011/2011/09/29 (MP)
KM28338	H1N1	China	2011	Alswine/Guapix/S3/2011/2011/09/29 (MP)
CY116437	H1N1	Belgium	2007	Alswine/Gent/132/2007/2007/07/07 (MP)
CY116438	H1N1	Belgium	2007	Alswine/Gent/132/2007/2007/09/02 7 (MP)
CY116429	H1N1	Belgium	2007	Alswine/Gent/132/2007/2007/07/07 (MP)
CY010581	H1N1	Spain	2004	Alswine/Spain/S3/2007/2004/07/04 (MP)
HF7298	H1N1	Spain	2005	Alswine/Spain/S3/2007/2005/07/05 (MP)
CY116458	H1N1	Italy	2005	Alswine/Italy/293/2006/2006/07/05 (MP)
CY116522	H1N1	Italy	2005	Alswine/Italy/T12/2005/2005/07/05 (MP)
CY116525	H1N2	Italy	2005	Alswine/Italy/T12/2005/2005/07/05 (MP)
EU70933	H1N1	Germany	2012	Alswine/France/22/20340/2012/2012/09/07 (MP)
KR70933	H1N1	France	2012	Alswine/France/22/20340/2012/2012/09/07 (MP)
HF74905	H1N2	Spain	2007	Alswine/Span/SP12/2009/2007/07/07 (MP)
KT07033	H1N1	Spain	2009	Alswine/Wuerzburg/ID10990/2009/2009/11/17 7 (MP)
KC22519	H1N1	Germany	2007	Alswine/Span/SP11/2012/2007/07/07 (MP)
HF674896	H1N1	Spain	2007	Alswine/Span/SP11/2012/2007/07/07 (MP)
KR701228	H1N2	Belgium	2010	Alswine/Bakum/1832/2009/2009/07/07 (MP)
KR696737	H1N1	France	2010	Alswine/France/Cotesd'Amor/0275/2010/2011/11/23 (MP)
HF734914	H1N1	Belgium	2007	Alswine/Gent/0559/LPA/2007/2007/07/07 (MP)
KR697976	H1N1	France	2011	Alswine/France/Morbihan/0294/2011/2011/06/14 (MP)
KR698753	H1N1	France	2011	Alswine/France/Morbihan/0294/2011/2011/04/07 7 (MP)
KR698753	H1N2	Italy	2010	Alswine/Italy/275/2009/2010/09/25 7 (MP)
KR698983	H1N2	Italy	2010	Alswine/Italy/275/2009/2010/09/25 7 (MP)
KR70965	H1N2	France	2012	Alswine/France/37/20345/2012/2012/07/07 (MP)
KR70965	H1N1	France	2012	Alswine/France/37/20345/2012/2012/07/07 (MP)
KR702051	H1N1	France	2011	Alswine/France/Morbihan/0295/2011/2011/05/03 7 (MP)
GO161107	H1N2	Germany	2000	Alswine/Bakum/1832/2009/2009/07/07 (MP)
JN375231	H1N1	China	2010	Alswine/Guangdong/161/2010/2010/05/28 7 (MP)
JN375233	H1N1	China	2010	Alswine/Guangdong/165/2010/2010/05/28 7 (MP)
JN375234	H1N1	China	2010	Alswine/Guangdong/165/2010/2010/05/28 7 (MP)
JN375237	H1N1	China	2010	Alswine/Guangdong/167/2010/2010/05/28 7 (MP)
JN375238	H1N1	China	2010	Alswine/Guangdong/167/2010/2010/05/28 7 (MP)
JN375239	H1N1	China	2010	Alswine/Guangdong/168/2010/2010/05/28 7 (MP)
CY081664	H1N2	Hong Kong	2009	Alswine/Hong Kong/147/2009/2009/07/23 7 (MP)
KR702053	H1N1	China	2010	Alswine/Guangdong/1606/2010/2010/02/27 7 (MP)
JN375243	H1N1	China	2010	Alswine/Guangdong/161/2010/2010/05/28 7 (MP)
JN375243	H1N2	China	2010	Alswine/Guangdong/165/2010/2010/05/28 7 (MP)
JN375244	H1N1	China	2010	Alswine/Guangdong/167/2010/2010/05/27 7 (MP)
JN375244	H1N2	China	2010	Alswine/Guangdong/167/2010/2010/05/27 7 (MP)
JN375245	H1N1	China	2010	Alswine/Guangdong/168/2010/2010/05/27 7 (MP)
JN375246	H1N2	China	2010	Alswine/Guangdong/168/2010/2010/05/27 7 (MP)
KR702053	H1N2	Spain	2007	Alswine/Span/82/2007/2007/07/07 (MP)
CY116561	H1N2	Belgium	2007	Alswine/Gent/96/2007/2007/07/07 (MP)
KR698984	H1N1	Germany	2007	Alswine/Germany/Mecklenburg-Vorpommern/0229/2010/2010/03/29 7 (MP)
KR698971	H1N1	Netherlands	2011	Alswine/Netherlands/Groningen/186/2011/2011/04/01 7 (MP)
KR698979	H1N1	Netherlands	2011	Alswine/Belgium/Meeusen/23-01/2011/2011/05/27 7 (MP)
KR699543	H1N1	Belgium	2011	Alswine/Belgium/Meeusen/23-01/2011/2011/05/27 7 (MP)
KR701402	H1N2	Germany	2011	Alswine/Germany/Visbek/ID133/2011/2011/07/07 (MP)
KJ847579	H1N1	Italy	2012	Alswine/Italy/508/2012/2012/2012/01/07 7 (MP)
KR700707	H1N2	Netherlands	2011	Alswine/Netherlands/Nistelrode/530/2011/2011/12/37 7 (MP)
KR700811	H1N1	Belgium	2012	Alswine/Belgium/Denize/393/2012/2012/02/04 7 (MP)
KR700812	H1N2	Netherlands	2012	Alswine/Netherlands/Mil-CV2617/2012/2012/02/04 7 (MP)
KR700834	H1N1	Netherlands	2012	Alswine/Netherlands/Vliden/220/2012/2012/02/04 7 (MP)
KR701156	H1N1	Netherlands	2012	Alswine/Netherlands/Mil-CV2617/2012/2012/02/04 7 (MP)
KR701161	H1N1	Belgium	2011	Alswine/Belgium/Valdegen/581/2010/2010/12/27 7 (MP)
KR701188	H1N2	Germany	2010	Alswine/Germany/Stedinger/ID11945/2010/2010/05/10 7 (MP)
KR699943	H1N1	Belgium	2011	Alswine/Belgium/Wingene/45/2011/2011/10/07 7 (MP)
KR702050	H1N2	Italy	2010	Alswine/Italy/302/249/2010/2010/05/27 7 (MP)
KR701180	H1N2	Germany	2010	Alswine/Germany/Otendorf/ID11910/2010/2010/04/29 7 (MP)
KR702054	H1N2	Spain	2011	Alswine/Span/24/237/2011/2011/05/17 7 (MP)
KR700917	H1N1	France	2012	Alswine/France/22/12046/2012/2012/04/17 7 (MP)
KJ847657	H1N1	Italy	2012	Alswine/Italy/552/2012/2012/2012/03/07 7 (MP)
KR702050	H1N2	Belgium	2010	Alswine/Belgium/Valdegen/581/2010/2010/12/27 7 (MP)
KR701238	H1N2	Belgium	2010	Alswine/Belgium/Valdegen/581/2010/2010/12/27 7 (MP)
KR702058	H1N1	France	2012	Alswine/France/22/10592/2011/2011/02/08 7 (MP)
KR702059	H1N2	France	2011	Alswine/France/22/10592/2011/2011/02/08 7 (MP)
KR701446	H1N2	Spain	2012	Alswine/Span/31788/2012/2012/04/02 7 (MP)
KR699761	H1N1	France	2011	Alswine/France/Morbihan/0219/2011/2011/04/18 7 (MP)
KR703996	H1N1	Poland	2012	Alswine/Poland/1744/2012/2012/05/17 7 (MP)
KR699906	H1N1	Netherlands	2012	Alswine/Netherlands/Kotwilkertonk/51/2012/2012/02/07 7 (MP)
KR702052	H1N1	France	2012	Alswine/France/50-1233/2012/2012/01/10 7 (MP)
KM029122	H1N1	Hong Kong	2012	Alswine/Hong Kong/NS2/2012/2012/01/05 7 (MP)
KM029162	H1N1	Hong Kong	2012	Alswine/Hong Kong/NS2/2012/2012/01/05 7 (MP)
KM029170	H1N1	Hong Kong	2012	Alswine/Hong Kong/23/2012/2012/01/05 7 (MP)
KM029183	H1N1	Hong Kong	2012	Alswine/Hong Kong/28/2012/2012/01/05 7 (MP)
KM029184	H1N2	United Kingdom	1993	Alswine/England/375/17/1993/1993/10/24 7 (MP)
KR700529	H1N1	United Kingdom	2011	Alswine/England/22/10592/2011/2011/02/08 7 (MP)
KR701004	H1N2	United Kingdom	1994	Alswine/England/22/10592/2011/2011/02/08 7 (MP)
KR701004	H1N1	United Kingdom	1994	Alswine/England/22/10592/2011/2011/02/08 7 (MP)
KR701004	H1N2	United Kingdom	1994	Alswine/England/22/10592/2011/2011/02/08 7 (MP)
KR701004	H1N1	United Kingdom	1994	Alswine/England/43/180/1994/1994/05/07 7 (MP)
KR702055	H1N1	United Kingdom	1994	Alswine/England/43/180/1994/1994/05/07 7 (MP)
CY116064	H1N1	United Kingdom	2002	Alswine/England/254/2002/2002/03/07 7 (MP)
CY116108	H1N2	United Kingdom	2009	Alswine/England/303/2009/2009/04/07 7 (MP)
CY116108	H1N1	United Kingdom	2009	Alswine/England/303/2009/2009/04/07 7 (MP)
CY116114	H1N1	United Kingdom	2006	Alswine/England/337/80/2006/2006/03/13 7 (MP)
KR700643	H1N2	United Kingdom	2007	Alswine/England/267/2007/2007/02/22 7 (MP)
CY116109	H1N1	United Kingdom	2007	Alswine/England/001/195/2007/2007/11/06 7 (MP)
CY116109	H1N2	United Kingdom	2007	Alswine/England/107/11998/1994/01/03 7 (MP)
CY116162	H1N1	United Kingdom	1994	Alswine/England/107/11998/1994/01/03 7 (MP)
CY116162	H1N2	United Kingdom	1994	Alswine/England/107/11998/1994/01/03 7 (MP)
CY116061	H1N1	United Kingdom	1992	Alswine/England/254/211/1992/1992/10/17 7 (MP)
KR700656	H1N2	United Kingdom	1994	Alswine/England/43/180/1994/1994/05/07 7 (MP)
CY116255	H1N1	United Kingdom	1998	Alswine/England/636/04/1998/1998/02/05 7 (MP)
KR701357	H1N1	United Kingdom	1994	Alswine/England/321/1994/1994/05/07 7 (MP)
KR700521	H1N1	United Kingdom	2011	Alswine/England/125/2011/2011/11/24 7 (MP)
KR700662	H1N1	United Kingdom	2011	Alswine/England/43/206/1994/1994/02/07 7 (MP)
CY116178	H1N2	United Kingdom	1994	Alswine/England/43/206/1994/1994/02/07 7 (MP)
CY116199	H1N1	United Kingdom	2008	Alswine/England/997/2008/2008/12/09 7 (MP)
KR703037	H1N2	United Kingdom	2001	Alswine/England/43/12/2001/2001/02/21 7 (MP)
CY116193	H1N2	United Kingdom	1997	Alswine/England/905/1997/1997/02/10 7 (MP)
CY116333	H1N2	United Kingdom	1997	Alswine/England/905/1997/1997/02/10 7 (MP)

CY116302	H1N1	United King	1995	Aswne/England/771270/1995 1995/12/04 7 (MP)
CY116122	H1N1	United King	1999	Aswne/England/638/1999 1999/06/16 7 (MP)
CY116263	H1N1	United King	1998	Aswne/England/6459/13/1998 1998/12/05 7 (MP)
KR707030	H1N1	United King	2012	Aswne/Scotland/03632/2001 2012/07/16 7 (MP)
CY116154	H1N1	United King	2001	Aswne/England/9572/2001 2001/11/14 7 (MP)
CY116271	H1N1	United King	1997	Aswne/England/61/2001 1997/02/11 7 (MP)
CY116279	H1N1	United King	1998	Aswne/England/632/27/1998 1998/11/19 7 (MP)
CY116308	H1N1	United King	1998	Aswne/England/193667/1998 1998/03/04 7 (MP)
CY116024	H1N1	United King	2000	Aswne/England/17789/2000 2000/03/17 7 (MP)
CY116255	H1N1	United King	2001	Aswne/England/10447/2001 2001/01/15 7 (MP)
CY115922	H1N1	United King	2001	Aswne/England/00472/2001 2001/01/15 7 (MP)
CY116225	H1N1	United King	1999	Aswne/England/576/10/1998 1999/11/12 7 (MP)
CY116140	H1N1	United King	2002	Aswne/England/131/2002 2002/04/09 7 (MP)
CY115982	H1N1	United King	2004	Aswne/England/131/2004 2004/05/09 7 (MP)
CY116217	H1N2	United King	2008	Aswne/England/483/2008 2008/05/12 7 (MP)
K889410	H1N1	Italy	1981	Aswne/Italy/147/1981 1981/07 7 (MP)
K889509	H1N1	Germany	1981	Aswne/England/147/1981 1981/07 7 (MP)
KJ889402	H1N1	Italy	1981	Aswne/Italy/V147/1981 1981/7 (MP)
KJ889351	H1N1	Germany	1981	Aswne/Amberg/7/1981 1981/02/23 7 (MP)
KJ889387	H1N1	Germany	1984	Aswne/Brabant/1984 1984/7 (MP)
KJ889319	H1N1	France	1980	Aswne/Marseille/2360/1980 1980/7 (MP)
KJ889343	H1N1	Germany	1981	Aswne/Amberg/4/1981 1981/02/17 7 (MP)
KJ889389	H1N1	Germany	1981	Aswne/Amberg/1/1981 1981/02/17 7 (MP)
EU478795	H1N1	Germany	1981	Aswne/Hannover/11/1981 1981/7 (MP)
DG188973	H1N1	Germany	1981	Aswne/Potsdam/15/1981 1981/7 (MP)
EU478797	H1N1	Germany	1981	Aswne/Potsdam/15/1981 1981/7 (MP)
K889327	H1N1	Netherlands	1980	Aswne/Netherlands/25/1980 1980/7 (MP)
ZB8862	H1N1	Netherlands	1980	Aswne/Netherlands/25/1980 1980/7 (MP)
K889311	H1N1	Germany	1979	Aswne/Amberg/1/1979 1979/12/07 7 (MP)
K889303	H1N1	Germany	1979	Aswne/Amberg/1/1979 1979/12/07 7 (MP)
CY077945	H1N2	Netherlands	1984	Aswne/Brabant/1984 1984/7 (MP)
CY022967	H1N1	Italy	1987	Aswne/Italy/61/1987 1987/7 (MP)
KM022954	H1N1	Italy	1987	Aswne/Italy/1987 1987/7 (MP)
EU478796	H1N1	Germany	1981	Aswne/Potsdam/11/1981 1981/7 (MP)
CY116481	H1N1	Italy	1998	Aswne/Italy/15/1-1998 1998/7 (MP)
CY115915	H1N2	United Kingdom	2002	Aswne/England/02295/2002 2002/12/04 7 (MP)
AB434356	H3N2	Thailand	2004	Aswne/Udon Thani/NA144/2004/2004/7 (MP)
KR706267	H1N2	United King	2004	Aswne/England/143/2004 2004/11/01 7 (MP)
CY116407	H1N1	France	1995	Aswne/OMS/21/12/1995 1995/7 (MP)
CY116439	H1N2	Thailand	2005	Aswne/Ratchaburi/NA1/2005 2005/7 (MP)
AB434347	H1N2	Thailand	2012	Aswne/Netherlands/Warejo/CV211A/2012 2012/05/15 7 (MP)
KR701148	H1N2	Netherlands	2012	Aswne/Hong Kong/394/2011 2011/10/10 7 (MP)
KM022828	H1N1	Hong Kong	2003	Aswne/Hong Kong/109/2003 2003/7 (MP)
AB434296	H1N1	Thailand	2003	Aswne/Ratchaburi/NAH550/2003/2003/7 (MP)
KJ162040	H1N2	Thailand	2012	Aswne/Thailand/CI/S3350m/2012 2012/02/13 7 (MP)
KR700935	H1N1	Poland	2013	Aswne/Poland/0869/2013 2013/03/22 7 (MP)
KR701020	H1N1	Poland	2013	Aswne/Poland/0869/2013 2013/03/22 7 (MP)
KR701250	H1N2	Spain	2011	Aswne/Spain/23885/2011 2011/06/15 7 (MP)
KR700382	H1N2	Germany	2011	Aswne/Germany/Luhne/IDT/287/2011 2011/01/01 7 (MP)
KR699697	H1N2	Germany	2010	Aswne/Germany/Stenfeld-IDT/2115/2010 2010/06/28 7 (MP)
KR699658	H1N2	Germany	2010	Aswne/Germany/Hanau-IDT/2115/2010 2010/06/28 7 (MP)
KR699699	H1N1	Germany	2011	Aswne/Germany/Ahren-Dollberg-IDT/1463/2012 2012/03/10 7 (MP)
KR699699	H1N2	Netherlands	2011	Aswne/Netherlands/Rheezeeven/66/2011 2011/02/17 7 (MP)
KR699700	H1N1	Germany	2012	Aswne/Germany/Renbergen-IDT/1457/2012 2012/03/05 7 (MP)
KR699705	H1N2	Germany	2011	Aswne/Germany/Bielefeld-IDT/3149/2011 2011/03/09 7 (MP)
KR699713	H1N2	Germany	2011	Aswne/Germany/Bielefeld-IDT/3149/2011 2011/03/09 7 (MP)
KR700015	H1N2	Netherlands	2011	Aswne/Netherlands/Leuven/51/2011 2011/11/09 7 (MP)
KR700370	H1N2	Netherlands	2011	Aswne/Netherlands/Leuven/51/2011 2011/11/09 7 (MP)
KR700381	H1N2	Germany	2011	Aswne/Germany/Duinen-IDT/1439/2011 2011/11/17 7 (MP)
KR700418	H1N1	Spain	2011	Aswne/Spain/2203/2011 2011/04/12 7 (MP)
KR700414	H1N1	Netherlands	2011	Aswne/Spain/2203/2011 2011/04/11 7 (MP)
KR699887	H1N1	Belgium	2010	Aswne/Belgium/Maldegem-53/2010 2010/11/27 7 (MP)
KR701376	H1N2	Belgium	2012	Aswne/Belgium/Ghelsbeke-26/2012 2012/07/31 7 (MP)
KR701418	H1N2	Netherlands	2012	Aswne/Netherlands/Westerhout/53/2011 2011/11/07 7 (MP)
KR701266	H1N2	Netherlands	2012	Aswne/Netherlands/Westerhout/53/2011 2011/11/07 7 (MP)
KM027834	H1N1	China	2012	Aswne/Guangdong/68/2012 2012/03/01 7 (MP)
KM027850	H1N2	China	2012	Aswne/Guangdong/68/2012 2012/03/01 7 (MP)
KM027858	H1N2	China	2012	Aswne/Guangdong/67/2012 2012/03/01 7 (MP)
KM027874	H1N2	China	2012	Aswne/Guangdong/70/2012 2012/03/01 7 (MP)
KM027882	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027892	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027898	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027904	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027910	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027916	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027922	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027928	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027934	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027940	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027946	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027952	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027958	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027964	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027970	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027976	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027982	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027988	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027994	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028000	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028006	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028012	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028018	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028024	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028030	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028036	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028042	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028048	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028054	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028060	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028066	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028072	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028078	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028084	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028090	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028096	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028102	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028108	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028114	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028120	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028126	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028132	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028138	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028144	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028150	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028156	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028162	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
AB620174	H1N1	Thailand	2009	Aswne/Sanburin/NA16625-1/2009 2009/11/7 (MP)
AB620176	H1N2	Thailand	2005	Aswne/Sanburin/NA13021/2005 2005/7 (MP)
AB434330	H1N2	Thailand	2012	Aswne/Sanburin/NA13021/2012 2012/03/25 7 (MP)
KR701442	H1N2	Hungary	2012	Aswne/Sanburin/NA13021/2012 2012/03/25 7 (MP)
KM027826	H1N2	China	2012	Aswne/Guangdong/862/2012 2012/03/01 7 (MP)
KM027834	H1N2	China	2012	Aswne/Guangdong/863/2012 2012/03/01 7 (MP)
KM027842	H1N2	China	2012	Aswne/Guangdong/873/2012 2012/03/01 7 (MP)
KM027850	H1N2	China	2012	Aswne/Guangdong/876/2012 2012/03/01 7 (MP)
KM027858	H1N2	China	2012	Aswne/Guangdong/704/2012 2012/03/01 7 (MP)
KM027874	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027882	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027892	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027908	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027914	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027920	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027926	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027932	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027938	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027944	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027950	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027956	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027962	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027968	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027974	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027980	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027986	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM027992	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028008	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028014	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028020	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028026	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028032	H1N2	China	2012	Aswne/Guangdong/77/2012 2012/03/01 7 (MP)
KM028038	H1N2	China	2012</	

KC139733	H3N2	USA	2012	Alswine/Minnesota/A/01270872/2012/2012/10/15 (MP)
JF34436	H3N2	Canada	2008	Alswine/Minnesota/C/0240/2008/2008/12/26? (MP)
CY15424	H3N2	Canada	2010	Alswine/Minnesota/C/0149/2010/2010/10/01? (MP)
J035059	H3N2	USA	1970	Alswine/Wisconsin/I/1971 1971/1/7 (MP)
CY028300	H1N1	USA	1966	Alswine/Wisconsin/I/1968 1968/1/7 (MP)
CY028303	H3N2	USA	1967	Alswine/Wisconsin/I/1967 1967/1/7 (MP)
CY023224	H1N1	USA	1961	Alswine/Wisconsin/I/1961 1961/1/7 (MP)
CY022438	H1N1	USA	1970	Alswine/Wisconsin/P/2/1970 1970/1/7 (MP)
CY022439	H3N2	USA	1970	Alswine/Wisconsin/P/2/1970 1970/1/7 (MP)
CY159090	H3N2	Mexico	2011	Alswine/Mexico/S/1444/2011/2011/10/21? (MP)
CY158794	H3N2	Mexico	2011	Alswine/Mexico/S/1444/2011/2011/10/21? (MP)
CY158795	H3N2	Mexico	2011	Alswine/Mexico/S/1444/2011/2011/10/21? (MP)
CY158226	H1N1	USA	2008	Alswine/North Carolina/G/13/2008 2008/9/28? (MP)
JN162034	H3N2	USA	2010	Alswine/Iowa/A/0463/2010/2010/12/22? (MP)
J032803	H3N2	USA	2003	Alswine/Iowa/A/0463/2003/2003/10/22? (MP)
CY157648	H1N1	USA	2009	Alswine/Hubei/0/2009/2009/03/10? (MP)
CY091764	H3N2	China	2009	Alswine/Hubei/0/2009/2009/03/10? (MP)
CY091765	H3N2	China	2009	Alswine/Hubei/0/2009/2009/03/10? (MP)
HQ853345	H1N2	China	2010	Alswine/Guangdong/I/2010 2010/01/03? (MP)
FJ374516	H3N2	China	2007	Alswine/Shanghai/I/2007 2007/03/24? (MP)
HQ853345	H1N2	China	2005	Alswine/Hong Kong/I/562/2005/2005/11/11? (MP)
GQ229355	H1N2	Hong Kong	2005	Alswine/Hong Kong/I/562/2005/2005/11/11? (MP)
JU066084	H1N2	China	2008	Alswine/Guangdong/I/223/2008 2008/7/7 (MP)
GQ229355	H1N2	Hong Kong	2008	Alswine/Hong Kong/I/223/2008 2008/7/7 (MP)
CY122336	H1N1	Mexico	2010	Alswine/Mexico/M/19/2010 2010/1/7 (MP)
CY122396	H1N1	Mexico	2010	Alswine/Mexico/M/20/2010 2010/1/7 (MP)
CY122407	H1N1	Mexico	2010	Alswine/Mexico/V/2/2010 2010/1/7 (MP)
CY122392	H1N1	Mexico	2010	Alswine/Mexico/V/2/2010 2010/1/7 (MP)
CY176742	H1N1	USA	2003	Alswine/Texas/I/015/2003/2003/01/02? (MP)
CY176742	H1N1	USA	2002	Alswine/Texas/I/015/2002/2002/01/02? (MP)
CY085505	H1N2	USA	2002	Alswine/Hong Kong/I/52/2002 2002/05/24? (MP)
CY085505	H1N1	Hong Kong	2001	Alswine/Hong Kong/I/57/2001 2001/05/17? (MP)
CY085505	H1N2	USA	2001	Alswine/Hong Kong/I/57/2001 2001/05/17? (MP)
CY085505	H1N2	USA	2000	Alswine/Hong Kong/I/57/2000 2000/10/3? (MP)
CY085497	H1N1	Hong Kong	2002	Alswine/Hong Kong/I/27/2002 2002/05/29? (MP)
CY085497	H1N1	Hong Kong	2001	Alswine/Hong Kong/I/83/2001 2001/03/12? (MP)
CY085497	H1N1	Hong Kong	2001	Alswine/Hong Kong/I/83/2001 2001/03/12? (MP)
CY085497	H1N1	Hong Kong	2001	Alswine/Hong Kong/I/NS/134/2001 2001/09/15? (MP)
CY085337	H1N1	Hong Kong	2001	Alswine/Hong Kong/I/NS/0/2000 2000/09/15? (MP)
CY159002	H1N1	Hong Kong	2011	Alswine/Hong Kong/I/NS/0/2011 2011/09/15? (MP)
J068915	H3N2	USA	2011	Alswine/Iowa/A/0203/2011/2011/06/16? (MP)
JH16138	H1N1	USA	2011	Alswine/Iowa/A/045/2011/2011/06/16? (MP)
CY107018	H3N2	USA	2009	Alswine/Iowa/A/045/2009/2009/03/06? (MP)
JX657711	H1N2	USA	2012	Alswine/Illinois/I/138/2012/2012/06/11? (MP)
KC751532	H1N2	USA	2012	Alswine/Kansas/I/12/2012/2012/06/11? (MP)
CY159310	H1N2	USA	2012	Alswine/Iowa/A/015/2012/2012/06/11? (MP)
AB434396	H1N1	Japan	1981	Alswine/Iwakaidai/I/1981 1981/1/7 (MP)
AB434411	H1N1	Japan	1980	Alswine/Ehime/I/1980 1980/1/7 (MP)
J032832	H3N2	USA	2002	Alswine/North Carolina/I/16/2002/2002/7 (MP)
CY09851	H1N1	USA	2003	Alswine/HDC/0/2003/2003/03/03? (MP)
CY191930	H3N2	Japan	2003	Alswine/HDC/0/2003/2003/03/03? (MP)
HQ320511	H3N2	Japan	2013	Alswine/Iowa/A/13/2009/2013/2013/07/19? (MP)
JX659690	H1N1	USA	2012	Alswine/Nebraska/A/013/049/2012/2012/06/28? (MP)
CY158450	H1N2	USA	2010	Alswine/Minnesota/S/G/13/2010/2010/11/23? (MP)
JH16138	H1N1	USA	2010	Alswine/Iowa/A/013/2010/2010/11/26? (MP)
CY022318	H1N1	USA	1985	Alswine/Iowa/I/1985 1985/1/7 (MP)
CY027508	H1N2	USA	1985	Alswine/Iowa/I/1985 1985/1/7 (MP)
CY159188	H3N2	USA	2003	Alswine/Iowa/Campbell/I/15/2003 2003/07/02? (MP)
KF712461	H1N1	USA	2013	Alswine/Nebraska/A/039/964/2013/2013/09/10? (MP)
KC149912	H1N1	USA	2012	Alswine/Nebraska/A/027/117/2012/2012/05/24? (MP)
JX657711	H1N1	USA	2012	Alswine/Iowa/A/013/2012/2012/05/24? (MP)
KJ452371	H3N2	USA	2013	Alswine/Iowa/A/13/2009/2013/2013/07/19? (MP)
CY116953	H1N1	United King	1993	Alswine/England/C/28/902/1993/1993/04/21? (MP)
KM295494	H1N2	Hong Kong	2010	Alswine/Hong Kong/I/256/2010/2010/08/26? (MP)
CY085524	H1N2	Hong Kong	2002	Alswine/Hong Kong/I/248/2002/2002/09/09? (MP)
CY085524	H1N1	Hong Kong	2001	Alswine/Hong Kong/I/248/2001/2001/09/09? (MP)
CY085524	H1N2	China	2011	Alswine/Guizhou/I/307/52/2011/2011/05/23? (MP)
CY158626	H1N1	USA	2003	Alswine/Missouri/S/G/18/2003/2003/10/09? (MP)
CY158626	H1N2	USA	2003	Alswine/Missouri/S/G/18/2003/2003/10/09? (MP)
CY159074	H3N2	Canada	2011	Alswine/Hong Kong/I/NS/0/2011/2011/05/27? (MP)
CY085577	H1N2	China	2003	Alswine/Hong Kong/I/NS/0/2003/2003/10/7? (MP)
CY085521	H3N2	China	2003	Alswine/Hong Kong/I/NS/0/2003/2003/10/7? (MP)
CY085481	H1N1	Hong Kong	2001	Alswine/Hong Kong/I/NS/0/2001/2001/12/27? (MP)
CY085490	H1N1	Hong Kong	2001	Alswine/Hong Kong/I/NS/0/2001/2001/12/27? (MP)
CY098884	H1N1	USA	1986	Alswine/Iowa/21/1986 1986/1/7 (MP)
KP270887	H3N2	USA	2010	Alswine/Kansas/I/10/53/3/2010/2010/04/18? (MP)
CY085521	H1N2	China	2010	Alswine/Iowa/A/0203/2010/2010/04/18? (MP)
AB595817	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595818	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595819	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595820	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595821	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595825	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595826	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595827	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595828	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595829	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595830	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595831	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595832	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595833	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595834	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595835	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595836	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595837	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595838	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595839	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595840	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595841	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595842	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595843	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595844	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595845	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595846	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595847	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595848	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595849	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595850	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595851	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595852	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595853	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595854	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595855	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595856	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595857	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595858	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595859	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595860	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595861	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595862	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
AB595863	H3N2	Viet Nam	2010	Alswine/Binh Duong/I/03/02/2010/2010/02/7 (MP)
KC471428	H3N2	South Korea	2012	Alswine/Korea/C/703-1/2012/2012/03/06? (MP)
KC471428	H3N2	South Korea	2011	Alswine/Korea/C/712-1/2012/2012/01/20? (MP)
CY085509	H1N1	USA	2011	Alswine/Iowa/A/013/2011/2011/01/20? (MP)
CY159106	H1N1	USA	2003	Alswine/Nebraska/A/0178/2003/2003/08/29? (MP)
GU115936	H1N1	USA	2003	Alswine/Iowa/H/5HS/5/2003/2003/08/07? (MP)
KM209554	H1N1	Hong Kong	2010	Alswine/Hong Kong/I/NS/276/2010/2010/09/07? (MP)
DQ280203	H1N1	Canada	2012	Alswine/Alberta/562/6/2012/2012/03/21? (MP)
DQ280203	H1N1	Canada	2011	Alswine/Alberta/562/6/2011/2011/03/21? (MP)
DQ280244	H1N1	Canada	2004	Alswine/Ontario/239/6/2004/7/ (MP)
DQ280244	H1N1	Canada	2003	Alswine/Ontario/553/8/2003/7/ (MP)
DQ280220	H1N1	Canada	2004	Alswine/Ontario/239/6/2004/7/ (MP)
DQ280220	H1N2	Canada	2004	Alswine/Ontario/239/6/2004/7/ (MP)
DQ280234	H1N1	Canada	2004	Alswine/Ontario/482/5/2004/7/ (MP)
DQ280234	H1N2	Canada	2004	Alswine/Ontario/482/5/2004/7/ (MP)
AB600867	H1N2	Japan	2004	Alswine/Gifu/I/2/2004/2004/7/ (MP)
CY159450	H1N2	USA	2009	Alswine/Colorado/175/2009/2009/03/21? (MP)
A838693	H1N1	Japan	1931	Alswine/USA/1976-MA/1931 1931/7/ (MP)
CY072926	H1N1	USA	1931	Alswine/USA/1976-MA/1931 1931/7/ (MP)
CY072926	H1N1	USA	1935	Alswine/Ohio/23/1935 1935/7/ (MP)
CY072926	H1N1	USA	1935	Alswine/Ohio/23/1935 1935/7/ (MP)
CY072926	H1N1	USA	1935	Alswine/Ohio/23/1935 1935/7/ (MP)
CY072926	H1N1	USA	1935	Alswine/Ohio/23/1935 1935/7/ (MP)
CY072926	H1N1	USA	1935	Alswine/Ohio/23/1935 1935/7/ (MP)
A844171	H1N2	Japan	2008	Alswine/Miyazaki/I/2008 2008/7/ (MP)
A860085	H1N2	Japan	2004	Alswine/Nagata/29/2004/2004/7/ (MP)
EU273761	H1N2	China	2006	Alswine/Guangdong/I/66/2006 2006/7/ (MP)
EU273761	H1N2	China	2006	Alswine/Guangdong/I/65/2006 2006/7/ (MP)
EU273761	H1N2	China	2006	Alswine/Guangdong/I/65/2006 2006/7/ (MP)

Supplemental table 1. (continued)
Porcine reproductive and respiratory syndrome virus US (Type 2)

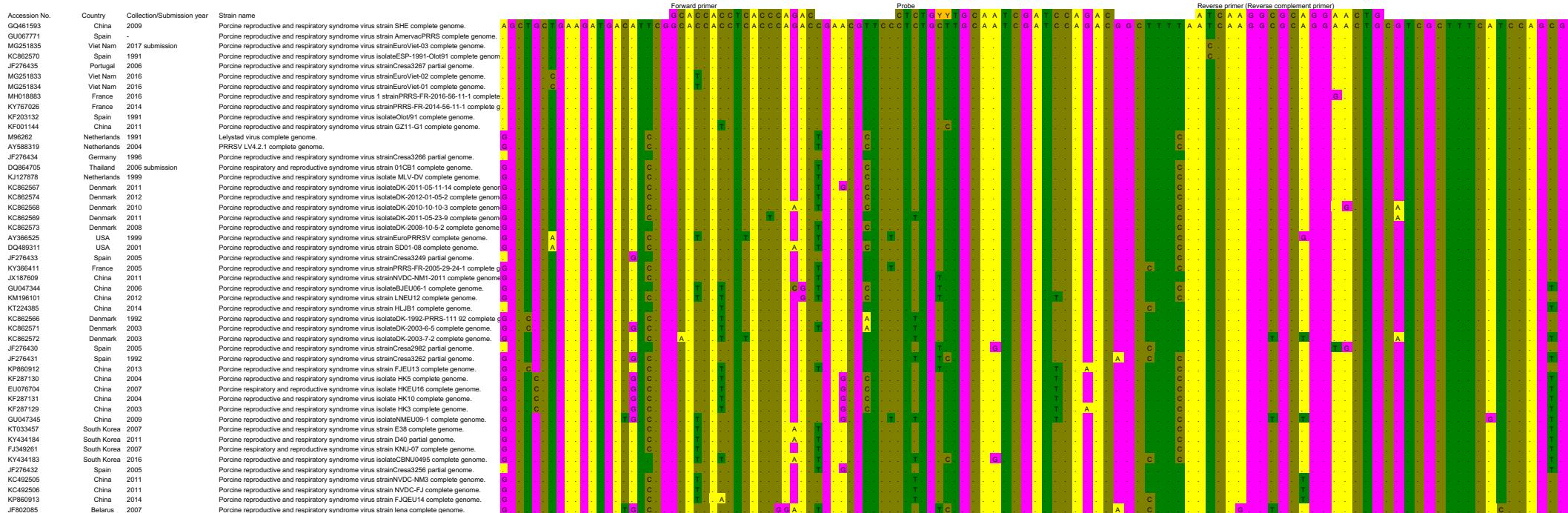


MF326998	USA	2015	Porcine reproductive and respiratory syndrome virus strain NC2015/ISU-11 complete genome
MF326999	USA	2015	Porcine reproductive and respiratory syndrome virus strain IA2015/ISU-9 complete genome.
KU000001	China	2015	Porcine reproductive and respiratory syndrome virus strain IA2015/ISU-13 complete genome.
KJ993073	China	2015	Porcine reproductive and respiratory syndrome virus strain HN2Z-2 complete genome.
MF766472	China	2015	Porcine reproductive and respiratory syndrome virus isolate HeH1501 complete genome.
MF766473	China	2015	Porcine reproductive and respiratory syndrome virus isolate HeH1502 complete genome.
KU978619	China	2015	Porcine reproductive and respiratory syndrome virus isolate GD-15-1 complete genome.
KU732266	China	2015	Porcine reproductive and respiratory syndrome virus isolate A2M2C-P90 complete genome.
KU318406	USA	2015	Porcine reproductive and respiratory syndrome virus isolate A2M2C-P90 complete genome.
KX815431	China	2015	Porcine reproductive and respiratory syndrome virus isolate 15N3N complete genome.
KP988477	China	2015	Porcine reproductive and respiratory syndrome virus strain F1CH complete genome.
KP988478	China	2015	Porcine reproductive and respiratory syndrome virus isolate F1CH complete genome.
KP988479	China	2015	Porcine reproductive and respiratory syndrome virus strain F1QJ complete genome.
KP179402	China	2015	Porcine reproductive and respiratory syndrome virus strain NT2 complete genome.
KP179403	China	2015	Porcine reproductive and respiratory syndrome virus strain NT2D complete genome.
KP998474	China	2015	Porcine reproductive and respiratory syndrome virus strain F1SD complete genome.
KP998475	China	2015	Porcine reproductive and respiratory syndrome virus strain F1SD complete genome.
KP794367	South Korea	2015	Porcine reproductive and respiratory syndrome virus isolate CV9-1 complete genome.
KU215416	China	2015	Porcine reproductive and respiratory syndrome virus strain 15LY1-FJ complete genome.
KU215417	China	2015	Porcine reproductive and respiratory syndrome virus strain 15LY2-FJ complete genome.
KP860009	China	2015	Porcine reproductive and respiratory syndrome virus strain FJ203 complete genome.
KH1415	China	2015	Porcine reproductive and respiratory syndrome virus isolate NT1 complete genome.
KP179402	China	2015	Porcine reproductive and respiratory syndrome virus strain NT1 complete genome.
KP179403	China	2015	Porcine reproductive and respiratory syndrome virus strain NT3 complete genome.
KT804696	China	2015	Porcine reproductive and respiratory syndrome virus strain F1YK complete genome.
KP998474	China	2015	Porcine reproductive and respiratory syndrome virus strain F1YK complete genome.
KP998475	China	2015	Porcine reproductive and respiratory syndrome virus strain F1YK complete genome.
JF268873	china	2016	Porcine reproductive and respiratory syndrome virus strain 08JS complete genome.
MH651739	China	2016	Porcine reproductive and respiratory syndrome virus strain HBFL-1604 complete genome.
MH651748	China	2016	Porcine reproductive and respiratory syndrome virus strain JZH-1604 complete genome.
MH651749	China	2016	Porcine reproductive and respiratory syndrome virus strain JZH-1609 complete genome.
MH651747	China	2016	Porcine reproductive and respiratory syndrome virus isolate HeH1601 complete genome.
KX766379	China	2016	Porcine reproductive and respiratory syndrome virus strain HHnx complete genome.
MH651747	China	2016	Porcine reproductive and respiratory syndrome virus strain S02Z-1603 complete genome.
MH651746	China	2016	Porcine reproductive and respiratory syndrome virus strain SD-1603 complete genome.
MH651742	China	2016	Porcine reproductive and respiratory syndrome virus strain SDGD-1604 complete genome.
MH651743	China	2016	Porcine reproductive and respiratory syndrome virus strain SD-1602 complete genome.
KY041782	China	2016	Porcine reproductive and respiratory syndrome virus strain HENX-8 complete genome.
KU115521	USA	2016	Porcine reproductive and respiratory syndrome virus isolate SD11-2-1-183 complete genome.
KU115522	USA	2016	Porcine reproductive and respiratory syndrome virus isolate SD11-2-1-184 complete genome.
MH651740	China	2016	Porcine reproductive and respiratory syndrome virus strain SD11-2-1-P100 complete genome.
MH651741	China	2016	Porcine reproductive and respiratory syndrome virus strain LNCH-1604 complete genome.
MH651742	China	2016	Porcine reproductive and respiratory syndrome virus isolate LNCH-1605 complete genome.
MH651743	China	2016	Porcine reproductive and respiratory syndrome virus isolate SD11-2-2-1606 complete genome.
KY363991	South Korea	2016	Porcine reproductive and respiratory syndrome virus isolate CA-2-2MP110 complete genome.
KY363992	South Korea	2016	Porcine reproductive and respiratory syndrome virus isolate CA-2-2MP120 complete genome.
MH651744	China	2016	Porcine reproductive and respiratory syndrome virus isolate CY2-1604 complete genome.
MH651745	China	2016	Porcine reproductive and respiratory syndrome virus strain SD99-1606 complete genome.
KX192113	USA	2016	Porcine reproductive and respiratory syndrome virus isolate NOV-16 complete genome.
KX192113	USA	2016	Porcine reproductive and respiratory syndrome virus isolate NOV-16-1 complete genome.
KX192118	USA	2016	Porcine reproductive and respiratory syndrome virus isolate NOV-17 complete genome.
KX192112	USA	2016	Porcine reproductive and respiratory syndrome virus isolate NOV-17-13 complete genome.
KX192114	USA	2016	Porcine reproductive and respiratory syndrome virus isolate NOV-17-13 complete genome.
KX192115	USA	2016	Porcine reproductive and respiratory syndrome virus isolate NOV-17-23 complete genome.
KX192116	USA	2016	Porcine reproductive and respiratory syndrome virus isolate NOV-17-23 complete genome.
KX192119	USA	2016	Porcine reproductive and respiratory syndrome virus isolate NOV-28 complete genome.
KY053459	China	2016	Porcine reproductive and respiratory syndrome virus isolate SDVG1606 complete genome.
MF663708	USA	2016	Porcine reproductive and respiratory syndrome virus 2 strain IA1472016 complete genome.
KX557708	China	2016	Porcine reproductive and respiratory syndrome virus strain QX complete genome.
MF539508	China	2016	Porcine reproductive and respiratory syndrome virus isolate SDX1601 complete genome.
MF818049	China	2016	Porcine reproductive and respiratory syndrome virus SCNJ-2016 complete genome.
MH046843	China	2016	Porcine reproductive and respiratory syndrome virus strain GDZS2016 complete genome.
KY761966	China	2016	Porcine reproductive and respiratory syndrome virus strain F1ZB2016 complete genome.
MG539001	China	2016	Porcine reproductive and respiratory syndrome virus strain GGDZ2016 complete genome.
KY745901	China	2016	Porcine reproductive and respiratory syndrome virus strain GGDZ222 complete genome.
EU262603	China	2016	Porcine respiratory and reproductive syndrome virus strain Em2007 complete genome.
KX510269	China	2016	Porcine reproductive and respiratory syndrome virus strain Tnh1501 complete genome.
KY745902	China	2016	Porcine reproductive and respiratory syndrome virus strain Tnh1502 complete genome.
KX980393	China	2016	Porcine reproductive and respiratory syndrome virus strain SDX1601 complete genome.
KX758250	China	2016	Porcine reproductive and respiratory syndrome virus strain FJX315 complete genome.
MF770574	China	2017	Porcine reproductive and respiratory syndrome virus strain 17-2-1-HZ complete genome.
MH048842	China	2017	Porcine reproductive and respiratory syndrome virus strain F1N1H-17 complete genome.
MH651746	China	2017	Porcine reproductive and respiratory syndrome virus strain SD11-2-1-184 complete genome.
MH121081	China	2017	Porcine reproductive and respiratory syndrome virus isolate SD17-36 complete genome.
MH500776	China	2017	Porcine reproductive and respiratory syndrome virus strain NADC30 complete genome.
MG844181	China	2017	Porcine reproductive and respiratory syndrome virus strain HBT17A complete genome.
MH651747	China	2017	Porcine reproductive and respiratory syndrome virus strain HBT17B complete genome.
MH167339	China	2017	Porcine reproductive and respiratory syndrome virus strain OH33 complete genome.
MK057531	South Korea	2017	Porcine reproductive and respiratory syndrome virus 2 isolate KU-JN1702 complete genome.
MK057532	South Korea	2017	Porcine reproductive and respiratory syndrome virus 2 isolate KU-JN1712 complete genome.
MK057533	China	2017	Porcine reproductive and respiratory syndrome virus strain 15HEN1 complete genome.
KX815415	China	2017	Porcine reproductive and respiratory syndrome virus strain 15HEN1 complete genome.
KO017119	China	2017	Porcine reproductive and respiratory syndrome virus strain FJDQ-2017 complete genome.
MH068878	China	2017	Porcine reproductive and respiratory syndrome virus isolate SD17-38 complete genome.
MH106878	China	2017	Porcine reproductive and respiratory syndrome virus isolate SD17-38 complete genome.
KY733214	China	2017	Porcine reproductive and respiratory syndrome virus isolate JSWA complete genome.
MG011718	China	2017	Porcine reproductive and respiratory syndrome virus strain F1JUY-2017 complete genome.
MG914067	China	2017	Porcine reproductive and respiratory syndrome virus isolate SGD17 complete genome.
MG913987	China	2017	Porcine reproductive and respiratory syndrome virus isolate LNWK130 complete genome.
MG936517	China	2017	Porcine reproductive and respiratory syndrome virus isolate LNWK130-1 complete genome.
MG539508	USA	2017	Porcine reproductive and respiratory syndrome virus strain USAIN/Purdue/1405/UN/2017 complete genome.
MF528965	USA	2017	Porcine reproductive and respiratory syndrome virus strain USAIN/Purdue/1405/UN/2017 complete genome.
MH324400	China	2017	Porcine reproductive and respiratory syndrome virus strain Sc07-1 complete genome.
KY488470	china	2017	Porcine reproductive and respiratory syndrome virus isolate GGDZ-2017 complete genome.
KY488470	China	2017	Porcine reproductive and respiratory syndrome virus isolate GGDZ-2017 complete genome.
KY488471	China	2017	Porcine reproductive and respiratory syndrome virus strain HN1K2 complete genome.
KY488471	China	2017	Porcine reproductive and respiratory syndrome virus strain GDGZ complete genome.
KY488473	China	2017	Porcine reproductive and respiratory syndrome virus strain GGDZ complete genome.
KY488473	China	2017	Porcine reproductive and respiratory syndrome virus strain GGDZ complete genome.
KY488475	China	2017	Porcine reproductive and respiratory syndrome virus strain HN1K2 complete genome.
KY488475	China	2017	Porcine reproductive and respiratory syndrome virus strain GDGZ complete genome.
KY488476	China	2017	Porcine reproductive and respiratory syndrome virus strain GDST complete genome.
KY488478	China	2017	Porcine reproductive and respiratory syndrome virus strain GGDY complete genome.
KY488477	China	2017	Porcine reproductive and respiratory syndrome virus strain GDY complete genome.
MF187956	China	2017	Porcine reproductive and respiratory syndrome virus isolate GDW06 complete genome.
MF772778	China	2017	Porcine reproductive and respiratory syndrome virus isolate GDGZ complete genome.
KY488474	China	2017	Porcine reproductive and respiratory syndrome virus strain GDHY complete genome.
MK450365	China	2018	Porcine reproductive and respiratory syndrome virus isolate CH-YY complete genome.
NC038291	USA	2018	Porcine reproductive and respiratory syndrome virus 2 complete genome.
RU87392	USA	2018	Porcine reproductive and respiratory syndrome virus 2 complete genome.
MH651743	China	2018	Porcine reproductive and respiratory syndrome virus strain FJ007-1608 complete genome.
MH651738	China	2018	Porcine reproductive and respiratory syndrome virus strain FJ007-1608 complete genome.
MK202793	China	2018	Porcine reproductive and respiratory syndrome virus isolate FJ009 complete genome.
MH370471	China	2018	Porcine reproductive and respiratory syndrome virus isolate CH2018/NCV-Anhui-1 complete genome.
MH198721	China	2018	Porcine reproductive and respiratory syndrome virus strain HZL1501 complete genome.
MH404256	China	2018	Porcine reproductive and respiratory syndrome virus isolate SD17 complete sequence.



Supplemental table 1. (continued)

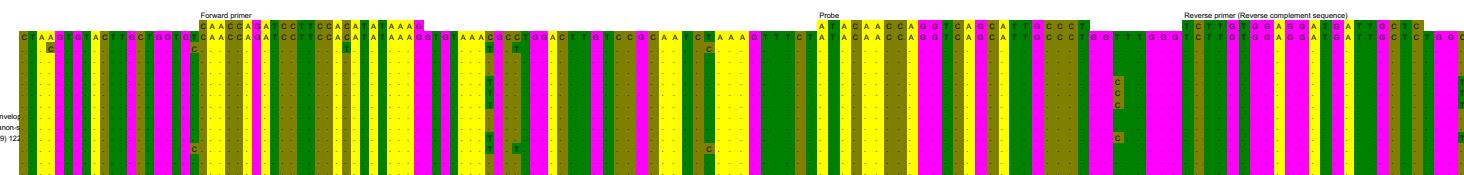
Porcine reproductive and respiratory syndrome virus EU (Type 1)



Supplemental table 1. (continued)
Porcine respiratory coronavirus

Supplemental table 1. (continued)

Porcine hemagglutinating encephalomyelitis virus			
Identified country	Collection/Submission year	Strain name	
EB916227 China	2004 submission	Porcine hemagglutinating encephalomyelitis virus strain HEV-JTB capsid spike glycoprotein (S) gene complete cds.	
KV492880 Netherlands	2017 submitted	Porcine hemagglutinating encephalomyelitis virus strain UU spike/glycoprotein (S) mRNA complete cds.	
DJ011590 N/A	Patent: EP 2005021798-A1 10 22-FEI MULTI-ALLEIC MOLECULAR DETECTION OF SARS-ASSOCIATED CORONAVIRUS.		
CS050817 N/A	Patent: WO 2005021798-A1 10 10-4 Sequence 10 from Patent WO2005021798.		
HC734574 N/A	Patent: EP 2182086-A2 16 05-MAY-Sequence 16 from Patent EP2182086.		
DD027016 N/A	Patent: JP 2005333513-A 10 10-NO-Biotinylated primers.		
CQ277741 N/A	Patent: WO 2004011651-A1 18 05-F Sequence 16 from Patent WO2004011651.		
KU127229 China	Ju-05	spike glycoprotein Porcine hemagglutinating encephalomyelitis virus hemagglutinin-esterase protein spike glycoprotein small envelope glycoprotein	
AY078417 USA	24-Jun-05	spike glycoprotein Porcine hemagglutinating encephalomyelitis virus hemagglutinin-esterase protein spike glycoprotein 4.9 kDa non-structural protein	
AF481863 N/A	2002 submission	S Porcine hemagglutinating encephalomyelitis virus HE glycoprotein spike glycoprotein (S) 4.9 kDa nonstructural protein (ns4.9) 122	
DQ011855 Belgium	2005 submission	S Porcine hemagglutinating encephalomyelitis virus strain VW072 complete genome.	
MF083115 China	2014	S Porcine hemagglutinating encephalomyelitis virus strain JL2008 complete genome.	
KY954464 China	2008	S Porcine hemagglutinating encephalomyelitis virus strain JL2008 complete genome.	



Supplemental table2. The nucleotide information of the primer sets used for conventional PCR

Target pathogen	Target gene	Primer sequence 5'-3'	denaturation	anyling	exten	cycls	Reference PMID
<i>Actinobacillus pleuropneumoniae</i>	apxIV	F ATACGGTTAATGGCGGTAAATGG	95°C	58°C	72°C	35	Xiao <i>et al.</i> (2009)
		R ACCTGAGTGCTCACCAACG					19794891
<i>Bordetella bronchiseptica</i>	Fla4	F TGGCGCCTGCCCTATC	95	55	72	35	Hozbor <i>et al.</i> (1999)
		R AGGCTCCCAAGAGAGAAAGGCTT					10422694
<i>Haemophilus parasuis</i>	16S RNA gene	F GTGATGAGGAAGGGTGGT	95	58	72	35	Oliveira <i>et al.</i> (2001)
		R GGC TTC GTC ACC CTC TGT					11480521
<i>Pasteurella multocida</i>	Kmt1	F ATCCGCTATTACCCAGTGG	95	58	72	35	Townsend <i>et al.</i> (1998)
		R GCTGTAAACGAACTCGCCAC					9542944
<i>Pasteurella multocida</i> toxin	toxA	F ATCTTAGATGAGCGACAAGG	95	55	72	35	Lichtensteiger <i>et al.</i> (1996)
		R TTGCCTCTGGAATCGCAC					8940444
<i>Streptococcus suis</i>	16S RNA gene	F CAGTATTACCGCATGGTAGATAT	95	56	72	35	Yong <i>et al.</i> (2008)
		R GTAAGATAACCGTCAAGTGAGAA					18554303
<i>Mycoplasma hyopneumoniae</i>	16S RNA gene	F AAGTTCATCGCGTAGGCC	95	56	72	35	Kurth <i>et al.</i> (2002)
		R GCTCCTACTCCATATTGCC					12423027
<i>Mycoplasma hyorhinis</i>	16S RNA gene	F TATCGCATGATGAGTAATAG	95	60	72	35	Kobayashi <i>et al.</i> (1996)
		R GCTGCGTTAGTGAAATTAT					8672579
<i>Mycoplasma hyosynoviae</i>	16S RNA gene	F GCAGTTGAGGAAATGCAACTG	95	60	72	35	Kobayashi <i>et al.</i> (1996)
		R TTAGCTCGCTCAGTGATTGG					8672579
Porcine circovirus 2	ORF2 (capsid protein)	F CGGATATTGAGTCCTGGTCG	95	57	72	35	Ellis <i>et al.</i> (1999)
		R ACTGTCAAGGCTACCACAGTC					9925205
Pseudorabies virus	glycoprotein gB	F TGGTCACCTCGAGCACAA	95	57	72	35	Hu <i>et al.</i> (2015)
		R TGAGCGTCTCGTCGTGA					26812812
Porcine cytomegalovirus	Polimerase gene	F CCCTGATCTTAAATGACGAGGACGTGAC	95	55	72	35	Hamel <i>et al.</i> (1999)
		R ACCGTCTGAGAGACTGAACCTCTGACAC					10523598
Swine influenza A virus	matrix	F GCATGGGYCTCATATACAAACMGRATGG	95	55	68	35	Lung <i>et al.</i> (2012)
		R GATGAGTCCAATAGTYCKCA					22796283
Porcine reproductive and respiratory virus	ORF6 snd 7	F GTACATTCTGGCCCTGCC	95	50	72	35	Kono <i>et al.</i> (1996)
		R GCCCTAATTGAATAGGTGAC					8915992
US strain	in	F TCGTTCGCGTCCCGGCTCC	95	55	72	25	
		R TTGACGACAGACACAATTGC					
EU strain	in	F CGCTGTGAGAAAGCCCCGAC	95	55	72	25	
		R TCGATTGCAAGCAGAGGGAG					
Porcine respiratory coronavirus	Spike protein	F GTAGTACAGGTTGCTGGATG	95	55	72	35	Lung <i>et al.</i> (2015)
		R AGTTGTTGTAACAATGCCATCA					21270231
Porcine hemagglutinating encephalomyelitis virus	Nucleotide	F CAGGAGGGACTGTTGTACCC	95	55	72	30	Rho <i>et al.</i> (2011)
		R ACAGTGCATTGTTGTTGGGG					21103919
	in	F TGCACCAGGAGTCCCCTCTA					
		R GCCAAGTTTGCCAGAACAA					
	in	F Forward primer; R, Reverse primer; PRRS and PHEV: Nested PCR					
		R					

Supplemental table 3. Detection of targets in lung tissue from clinical cases by Dempo-PCR and cPCR

Farm	Sample No.	age (days)	<i>Bordetella bronchiseptica</i>	<i>Actinobacillus pleuropneumoniae</i>	<i>Haemophilus parasuis</i>	<i>Pasteurella multocida</i>	<i>Pasteurella multocida</i> toxin	<i>Streptococcus suis</i>	<i>Mycoplasma hyopneumiae</i>	<i>Mycoplasma hyorhinis</i>	<i>Mycoplasma hyosynoviae</i>	<i>Pseudorabies virus</i>	<i>Porcine cytomgalovirus</i>	<i>Swine influenza A virus</i>	<i>Porcine reproductive and respiratory virus US strain</i>	<i>Porcine reproductive and respiratory virus EU strain</i>	<i>Porcine respiratory coronavirus</i>	<i>Porcine hemagglutinating encephalomyelitis virus</i>
		Assay type	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C
A	1	48	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	-
	2	48	-	-	-	-	+	+	+	-	-	-	+	+	-	-	+	+
	3	48	-	-	-	-	+	+	-	-	+	+	-	-	-	+	+	-
	4	96	-	-	+	+	+	+	+	-	-	+	+	-	-	-	-	-
B	5	63	-	-	-	-	+	+	-	-	-	+	+	-	-	+	+	-
	6	63	-	-	-	-	-	+	-	-	-	+	+	-	-	+	+	-
	7	51	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-
	8	63	-	-	-	-	-	-	-	-	+	+	-	-	-	+	+	-
C	9	N	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-
	10	56	-	-	-	-	+	-	-	-	-	+	+	-	-	-	-	-
	11	113	-	-	-	-	+	+	-	-	-	+	+	-	-	+	+	-
	12	111	-	-	-	-	+	+	-	-	-	+	+	-	-	+	+	-
D	13	67	-	-	-	-	+	-	+	+	-	-	+	+	-	-	+	+
	14	67	-	-	-	-	-	-	-	-	-	+	+	-	-	+	+	-
	15	81	-	-	-	-	+	+	-	-	-	+	+	-	-	+	+	-
	16	81	-	-	-	-	+	+	-	-	-	+	+	-	-	+	+	-
E	17	81	-	-	-	-	+	-	-	-	-	+	+	-	-	+	+	-
	18	97	-	-	-	-	+	+	-	-	-	+	+	-	-	+	+	-
	19	97	-	-	-	-	+	+	-	-	-	+	+	-	-	+	+	-
	20	110	-	-	-	-	-	+	+	-	-	-	+	+	-	-	-	-
F	21	110	+	+	+	-	-	-	+	+	-	-	+	+	-	+	+	-
	22	49	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-
	23	49	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	-
	24	142	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-
G	25	142	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26	92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	27	135	+	+	-	-	-	-	-	-	-	+	+	-	-	-	-	-
	28	135	+	+	+	-	-	-	-	-	-	+	+	-	-	+	+	-
H	29	58	-	-	-	-	-	-	-	-	-	+	+	-	-	+	+	-
	30	65	-	-	-	-	-	-	-	-	-	+	+	-	-	+	+	-

D, Dempo-PCR assay; C, cPCR assay; N, Unknown

:Samples with positive Dembo-PCR and negative cPCR were retested by cPCR under the following conditions: 2 mins at 95°C, 40 cycles of 95°C for 30 sec, 55°C for 30 sec, and 72°C for 45 sec, and a final extension step of 72°C for 5 mins.